AUDITING

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CASES AND QUESTIONS

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To Charles S. Ludlam, C.P.A.,

EXEMPLAR OF THE HIGHEST TYPE
OF PROFESSIONAL AUDITOR,
THIS WORK IS DEDICATED.

FOREWORD

I have tried to make this volume a thoroughly practical treatise on auditing, based upon the recognition of things as they actually are. The predominating thought has been to present the principles of auditing, and the conditions under which the work is performed, as concretely as possible so that the reader may develop therefrom, for his use in any case, a workable audit program that can be carried out with due regard for the practical considerations of time and expense. Incidental to the accomplishment of these aims, a special effort has been made to be definite and explicit in the discussion of each subject and leave no doubt in the mind of the reader as to the practical application of the principles enunciated.

The discussion is limited as far as has been thought practicable to the consideration of auditing as a specialty. It has been assumed that the reader is fairly well grounded in the theory of accounting, but the subjects of accounting and auditing are so interrelated that in many cases discussion of auditing principles has called for some consideration of accounting theory as well; in fact, there are some subjects, notably capital assets, with respect to which the purpose of auditing is essentially the determination of the observance of correct accounting principles, and wherever it has seemed to be desirable the outstanding features of those principles have been presented. The presentation throughout is purposely concise but it is thought that the work is sufficiently comprehensive to cover all the essential features of auditing.

The book is addressed primarily to students and practitioners of professional accountancy. The hope is entertained that the work will be instrumental to some little degree in raising the standard of professional practice, thus assisting in the advancement of the profession. Whatever progress the profession may make can be measured only by an increase in the degree of esteem with which it is regarded by the public.

The individual practitioner and the profession as a whole are benefited by any improvement in methods which results in

the performance of efficient work at reduced expense. An extremely important factor in the efficient performance of auditing work is the auditor's ability to keep before him at all times the purpose for which he has been engaged and the question as to what practical benefit is to be derived by his client from each part of the work done; the auditor should constantly analyze his efforts to determine whether he is really performing a service or is merely carrying out a stereotyped program. It is my conviction that if I were to accomplish nothing more through this book than to present convincingly and effectively to the minds of a few professional auditors, present and future, the importance of this matter, as I have tried to do, its existence would be amply justified.

No attempt has been made to apply the general principles and practices to specific lines of business. It is my experience that if the general principles are thoroughly understood, they can readily be adapted to the conditions prevailing in all but a few highly specialized lines, as to which the only difficulty lies in learning the peculiarities of the business and of the accounting system and organization. Such lines include banks, railroads, insurance companies, and brokerage houses, the workings of which have furnished material for entire volumes.

I have been fortunate in securing the collaboration of Mr. John A. Powelson, who has prepared the cases and questions in Part II. This material is an invaluable addition to the work as it brings out very clearly and graphically the practical application of a great many of the principles stated in the text, elaborating thereon where it has seemed desirable, and serves as a practical test of a student's progress in the study of the subject. It will be found interesting to every reader of the text.

WILLIAM H. BELL.

New York.

CONTENTS—PART I

CONTENTS—PART II

NEW YORK STATE C.P.A. QUESTIONS ON AUDITING, JUNE, 1923, AND JANUARY, 1924

PART I

Chapter I

INTRODUCTORY

Auditing Defined.

Before undertaking to discuss any subject, it is desirable to define it. The best way to define auditing is to tell why it is done, as the action is presumably such as to fulfil its purpose.

Using the word "audit" in its broadest sense, it may be stated in general that the purposes for which accounts and records are audited are as follows:

1. General verification of the accounts of a business to determine its financial condition, its operating results, and/or the fiduciary integrity of those in charge—with a view to reporting thereon to the owners, stockholders, executives, boards of directors or trustees, receivers, present or prospective lenders, prospective investors or purchasers, creditors' committees, mercantile agencies, mortgage trustees, or any other interested parties.
2. To determine whether funds of an organization have been properly accounted for and its affairs properly administered, for the satisfaction of the public, donors, and so forth; as in the case of governmental, religious, educational, and eleemosynary institutions.
3. To determine the profits or losses of a business, with a view to reporting to interested parties in connection with such matters as royalty agreements, profit-sharing agreements, and patent infringement suits.
4. To determine costs, inventories, fire losses, circulation of publications, and other specific matters for various special purposes.
5. To detect fraud.
6. To determine the extent of fraud already detected.
7. To prevent fraud by the moral effect upon the client's staff.

As it is the function of this book to show how an audit is made rather than to convince anyone of the benefits to be derived from auditing work, nothing need be said on the latter subject except as is implied in the foregoing outline of purposes.

It will be seen that auditing is essentially retrospective. Another distinguishing feature is that it is analytical. It differs from accounting, which is concerned with the current recording of business facts. The function of the auditor is the subjecting of the existing records to critical analysis for the purpose of proving or disproving their accuracy; and in most cases the preparation from the records, with such adjustments as are necessary, of statements and reports which will convey to the interested persons in an intelligible manner the information they require for their particular use.

The foregoing list of purposes is not intended to include specifically all the objectives of what may be called auditing. For example, an examination of the accounts may be undertaken solely for the purpose of detecting bookkeeping errors. Of course such work is an indispensable and inseparable part of a complete audit, and to some extent of any audit, but in comparison with the other purposes it is the least important, and it seems that if such work is undertaken by itself it should not be called auditing at all. It is regrettable that so much of that class of work has been done under the name of auditing that many business men's conception of a professional auditor is still that he is a "checker." It is equally regrettable that the methods of many auditors in making a complete audit, as well as the results produced by them, have left in the minds of a considerable proportion of business men the same impression of auditors as a class.

The detection of errors in principle is, of course, involved in all auditing work, and an incidental result which may be expected from such disclosures is the education of the office force in correct accounting principles with a view to preventing the repetition of such errors.

Although many audits fall into the same general class as to purpose, in no two cases are all conditions identical. Even in the same kind of business, with the same accounting system, there are differences in circumstances necessitating differences in methods. The human element is a considerable factor.

Every audit is an individual problem, the solution of which requires knowledge of the peculiar conditions obtaining in that case as well as of the underlying general rules.

Detection of fraud.—In the foregoing list of purposes of auditing, the detection of fraud has been given a comparatively subordinate place. *The reason for this is that nowadays the detection of fraud is seldom stated as the principal purpose of an audit.* This is easily explained, as by far the greater number of disclosures by auditors are of errors in accounting principle or practice. However, there is little doubt that the subject of fraud is almost always in the mind of a client when arranging for an audit, unless it is an expressly limited examination; and whether or not definitely so stated it is usually expected that any fraud will be disclosed by the audit.

In making a complete audit the detection of fraud should be regarded by the auditor as of equal importance with the determination of the financial condition and operating results. In arranging for a limited audit there should always be a distinct understanding between auditor and client with respect to the restriction upon the possibility of discovering fraud.

The results of the school training of auditors in recent years indicate an inclination on the part of educators to underrate the importance of the subject of detection of fraud in the study of auditing. This may be the natural reaction from the exaggerated notion prevailing a few years ago that an auditor was a sort of sleuth, inculcated with the idea that everybody was dishonest until proven otherwise; but it seems that there is a tendency to swing to the other extreme. Many auditors now appear to have almost implicit faith in the honesty of mankind, or at least they have an inadequate perception of the possibility of fraud in many situations where they should be suspicious. There is no reason to believe that human nature has changed in a few years; and even though in any given case there may be an elaborate system of internal check which renders the perpetration or concealment of fraud difficult, the auditor must constantly be on the alert to detect its existence. He should make a study in each case of the opportunities for fraud and direct his energies along those lines to discover whether any has been committed.

Prevention of fraud.—Coupled closely with the idea of the detection of fraud is that of the prevention of fraud through

the effect upon the client's staff of having the accounts audited. There is no doubt that such a purpose has been the motive for many an audit, and that in many more where it is not the principal reason it is a close second. An honest man should be kept honest, and one of the best ways to do so is to have him realize, in moments of temptation, that dishonesty is likely to be discovered.

Many dramatic incidents could be related bearing upon the moral effect of an audit. One, from the author's experience, will be cited. A partnership was about to be dissolved, and one of the partners called in an auditor to arrange for a balance sheet audit to determine the value of the business and each partner's interest. That night the bookkeeper and cashier, who had overheard the conversation, committed suicide and left a note confessing that he had misappropriated funds of the business. It later developed that the audit to be made, on account of its limited scope, would not have disclosed any part of the theft.

Classes of Audits.

Audits are classified as to their scope, which should be determined by their purpose, generally as follows:

1. Complete or detailed audits
2. Balance sheet audits
3. Special examinations or investigations.

Virtually all auditing work falls into one of these classes but now and then a variation is encountered. Such a case would be where a client desired a balance sheet audit and at the same time an audit of the cash records for a certain period, commonly known as a "cash audit." This latter class of audit has not been listed above for the reason that it should constitute a complete audit if the concern is on a cash basis; otherwise it would be a special examination. The making of a special examination of cash records without inquiry into the possible sources of receipts as indicated by the other accounts and records should be discouraged. If a client desires such an audit it will usually be found that if the situation is properly explained to him he will be willing to incur the additional expense of having a complete audit made.

Complete audits.—Of the two words commonly used as

designating this class of audit, the author prefers "complete" to "detailed," as all audits should extend to the details of the subjects falling within their scope but some are restricted to certain subjects or accounts. A complete audit involves a review of all transactions during a certain period as expressed in the accounts.

The purpose of making a complete audit is to prove or disprove the accuracy of the accounts in their entirety, with a view generally to determining the assets and liabilities at the end of the period, the results of operations during the period, and the fidelity of those charged with the administration of the business and the keeping of the accounts. Of course in some complete audits there are no assets and liabilities to determine, other than possibly the asset of cash.

The determination of assets involves, of course, verification of their existence.

Balance sheet audits.—There seems to be considerable difference of opinion regarding the definition of the term "balance sheet audit." The following is quoted from a pamphlet entitled "Uniform Accounting," issued by the Federal Reserve Board, Washington, in 1917, and reprinted in 1918 under the title "Approved Methods for the Preparation of Balance Sheet Statements" (the italics are ours):

> "The scope of a balance sheet audit *for a fiscal year or other operating period* of an industrial or mercantile corporation or firm comprises a verification of the assets and liabilities, a general examination of the profit and loss account, and, incidental thereto, an examination of the essential features of the accounting."

A balance sheet is a statement of conditions *at a date* rather than *for a period.* Therefore it seems incongruous for a balance sheet audit to be for a period. In the opinion of the author, which is shared by a large proportion of the representative practising accountants, a balance sheet audit is essentially the determination of assets and liabilities at a given date, and nothing more. Such action may involve examination of certain accounts such as plant property for periods as far back as the organization of the business, or, to take the other extreme, may not involve the examination of such accounts at all, as in the case of the property being stated in the balance sheet at values recently established by independent appraisal. Some examination of the profit and loss accounts must be made to

aid in the determination of assets and liabilities, but such examination may cover varying periods. It may be necessary to scrutinize the charges to expenses for repairs and replacements for several years and other operating accounts for only the last month of the current year.

It is doubtful if any reputable firm of auditors would state in its report that it had made a "balance sheet audit" for a certain year, and accordingly render without qualification a statement of income and profit and loss for that year taken from the books with only such verification as it was necessary to make in connection with the determination of the assets and liabilities at the end of the year. If the audit were to cover the operating accounts sufficiently to warrant the rendering of such a statement without qualification, it would be much better to extend its scope a little and make it a complete audit. In the opinion of the author, no statement of income and profit and loss is called for in a balance sheet audit and none should be rendered unless the client requests it, and then only with the qualification that it has been prepared from the books without verification. Of course it is entirely proper to include in the balance sheet a summary of the surplus account for the current period.

As previously indicated, a balance sheet audit may be supplemented by an examination of the operating accounts for the period. In that case a statement of income and profit and loss would be rendered and the report would be explicit as to the work done.

The term "balance sheet audit" is so technical that it should not be used in reports or other communications with laymen—if, in fact, with anyone—unless accompanied by an explanation. As has been stated, it is dangerous to say that a balance sheet audit *for a certain period* has been made, on account of the implication of verification of the operating accounts. The fact to be expressed is that an audit has been made *as of a certain date;* it adds nothing to say that a *balance sheet* audit has been made.

Special examinations or investigations.—All work undertaken by professional auditors, other than complete audits and balance sheet audits, may appropriately be described as special examinations. Perhaps the application of this term should be limited, however, so as to exclude the preparation of tax re-

turns and any merely clerical or bookkeeping work which may be performed by an auditor upon occasion. System work, which is frequently done by auditors, is excluded because it is in the nature of accounting rather than auditing.

The point may be raised by some persons that special examinations do not properly come under the head of auditing at all. Representative firms of professional accountants seldom use the term "audit" except as applied to less restricted examinations than those contemplated under this group. The term "examination" is most frequently used in a very general sense, but often, as in the case of financial institutions, it is employed to describe a balance sheet audit.

The question of terminology is almost entirely that of conforming to general usage, so that when a certain term is used it need not be explained. The student will search the dictionaries in vain for a satisfactory definition of "audit," as the definitions are all very general. As with most similar expressions, the technical usage must be accepted. It is thought that the word "audit" has come to have a technical significance at least suggestive of thoroughness and comprehensiveness, and therefore it is just as well not to use it in connection with a restricted examination.

A special examination may consist of the preparation of statements from the books with only partial verification, of detailed verification of specific accounts, or of any other work requiring the special skill possessed by professional auditors and involving the rendition of a report. The auditor's report on such an engagement should always be extremely explicit as to the work done, thereby clearly expressing the degree of responsibility assumed.

A distinctive feature of a special examination is that the client always has a very definite object, which feature essentially differentiates such work from a complete audit, or even a balance sheet audit, where the purpose is more general. It follows that in the execution of the more restricted examinations the auditor should make a special effort to study all phases of the particular situation with a view to giving the client all pertinent information in a manner which will best meet his requirements.

A special examination of operating accounts for a number of years may be made as supplementing a balance sheet audit.

Such an examination would cover only the outstanding features of the accounts and would consist of analysis to determine, as nearly as practicable, without verification of any items at their source, that the income as shown by the books was all derived from operations unless otherwise stated and that no expenses and losses were omitted. It is frequently desirable in such cases to adjust the accounts for report purposes in order to give effect in the operating accounts for the respective years to items which are actually applicable thereto but have been taken up on the books as charges or credits to surplus or profit and loss in subsequent years. When any such adjustments are made the facts should be stated in the report.

Qualifications of the Professional Auditor.

The professional auditor holds himself out to the public as an expert in accounts and in the interpretation of accounts. He is supposed not only to know how to record facts in accounts and to recognize those facts as recorded by others, but also to understand the significance of the facts in their relation to the past, present, and future of the business. He is both a reporter and an analyst, comparable with a combination of the newspaper reporter who writes up the current events and the editorial writer who analyzes them and shows their significance.

It is therefore essential that the successful auditor be skilled in the science of accounts and have considerable knowledge of how business is done. This knowledge of business need not in many particulars be as intimate as that of the business man whom the auditor serves, but the auditor cannot hope to solve, or to help in solving, the business man's problems unless he understands them. The aim of the young auditor should be to qualify himself to act as a business adviser, supplementing his knowledge of the fundamentals common to virtually all businesses by acquiring familiarity with the peculiarities of the particular businesses which he is called upon to serve.

In order to become a business adviser, one of the first things the auditor should learn to do is, whenever possible, to stop thinking and talking as a bookkeeper. In the opinion of the author it is only the very exceptional man who does not require practical bookkeeping experience as a part of his equipment as a professional accountant; but the successful accountant

overcomes the limitations imposed by the restricted viewpoint of the bookkeeper.

Familiarity with the principles of business affairs involves some knowledge of business law. It is not necessary for the auditor to have sufficient legal training to practice law, although those who have such training are in an enviable position, but he should be thoroughly grounded in the principles of common and statutory law relating to such subjects as contracts, sales, agency, negotiable instruments, partnerships, corporations, bankruptcy, and estates. The auditor should also have a good working knowledge of economics and be well informed regarding the principles and practice of finance. As the ability to write a good report is a considerable factor in the success of an auditor, he should have a fair command of English.

An important attribute of the auditor is integrity, and closely allied to it is another, moral courage. The professional auditor has a duty not only to his client but also to the public, and sometimes to the Government (as in tax matters), and he is frequently forced to take issue with his client on matters affecting these other interests. This calls for the observance of the highest ethical principles, and often requires great courage. Some very delicate questions arise in the auditor's relations with his clients which concern the conscience as well as the technical ability of the auditor.

It may be stated as an invariable principle that the professional auditor must not issue a report containing statements which he has reason to believe are untrue or misleading, even though his client, who pays his fee, should insist upon his doing so. It often becomes necessary for an auditor to withdraw from an engagement rather than violate this ethical principle, and sometimes to sue for his charges. On the other hand, it should not be forgotten that the auditor is primarily working for his client and it is therefore his duty to comply with the wishes of the client unless some vital principle would be violated by doing so. The author has known of more than one case where an auditor has taken an arbitrary stand on technical matters in opposition to the wishes of his client when he was prompted by none but the most imaginary reasons.

The auditor is also expected to observe strict ethical principles with respect to the confidential character of his work.

Generally speaking, the auditor must not divulge to others what he has learned of his clients' affairs. This is subject to the qualification that he may be forced to do so as a witness in court, as the courts generally have not yet extended to accountants the rule applying to lawyers, physicians, and clergymen regarding "confidential communications." The auditor should always inform himself regarding his rights if he is called upon to testify adversely to his client's interests.

There is another phase of the auditor's relations with his client that calls for the utmost probity; that is, the question of fees. In most engagements the client must trust the auditor as to the amount of work necessary to be done and paid for to accomplish the purpose desired. This is true even though the per-diem or total charge may be agreed upon. The auditor who exacts fees for services known to be unnecessary is guilty of a breach of trust; and nearly the same criticism can be made of the auditor who charges for unnecessary work done in ignorance of what is necessary.

The matter of ethics also applies to the relations of the auditor with his fellow practitioners. A diligent effort has been and is being made to establish the practice of public accountancy upon the plane of the professions rather than business, and this can be accomplished and maintained only by the strict observance of professional ethics in regard to competition among practitioners.

Among the necessary attributes of the auditor are tact and courtesy. The human element enters largely into the work of the auditor. Most of his work is done in the offices of the concerns whose accounts are being examined, and while conditions in this respect have improved with the extension of auditing work generally, there is still likely to be some antagonism on the part of the office force; or at least the auditor and his assistants are regarded as outsiders, and their presence as a necessary evil. An intelligent effort to secure the friendly co-operation of the office force is usually well rewarded. However, it is well not to carry friendliness to the point of familiarity, for the obvious reason that it is not consistent with independence.

There are times when the auditor expects to encounter opposition, as where access to the books to be examined is had only upon court order or where for other reasons the persons

in charge of the books are not in sympathy with the purposes of the examination or the methods employed by the auditor. Such a situation often calls for the exercise of the utmost tact, courage, and persistency in order to accomplish what is desired. The auditor must be absolutely indifferent to some forms of criticism and learn to control his temper.

The auditor should give careful consideration to his bearing in clients' offices. He should not go about with an air of superiority or conceit but his manner should suggest modest self-confidence and quiet dignity. He should be slow to criticize and should always give full consideration to the assertions and opinions of the executives and office force on all matters relating to the accounts, as manifestly they are in a better position to know the peculiarities of the particular business than he is, and he has much to learn from them. In short, the auditor should radiate a spirit of helpfulness rather than criticism.

The successful auditor must possess an inquiring mind; it must become instinctive for him to challenge the truth of every apparent fact and subject it to critical analysis. He must not assume anything to be correct without specific inquiry. That does not imply, however, that he should regard those whose work he is called upon to audit as dishonest until he proves that they are honest.

Last but not least among the necessary qualifications of the auditor is sound common sense. The most thorough training in all branches of theory will avail him little unless he has a practical sense of values and the ability to discriminate between essentials and non-essentials.

Legal Responsibility of the Professional Auditor.

There have been few American cases involving actions against public accountants for damages on account of losses sustained through reliance upon their work. Such decisions as have been rendered merely apply to accountants the common-law principle that one who represents himself as skilful in any trade or profession must exercise the degree of skill and diligence which may properly be expected of one offering his services to the public in that capacity. The accountant must use reasonable care to detect fraud and inaccuracies in

the accounts—what is reasonable depending upon the circumstances in each case. He is charged with expert knowledge of what conditions indicate dishonesty, but where there is no reasonable ground for suspicion he is not required to carry his investigation into unusual channels. The amount of damages that may be claimed is usually the amount lost by reason of the accountant's failure to perform his duty.

It will be seen that the law is rather lenient in requiring only the skill of the ordinarily skilful practitioner with respect to the discovery of fraud or inaccuracies and imposes penalties only when negligence is proved. Fortunately, public accountants as a class do not limit their efforts to their legal obligations. The national and state associations of accountants are doing much to control such practitioners as do not voluntarily assume their full moral responsibilities.

Aside from the question of the diligence to be exercised by the auditor in discovering inaccuracies, a case was recently decided involving carelessness in the language used in an auditor's report. The fraud committed was such that only the most detailed examination would have disclosed it. There were thousands of entries and the scope of the work as arranged with the client contemplated only tests, but the auditor in his report stated that *all* entries were traced to their original sources. If they had been, the fraud would have been discovered. The jury decided that the client was entitled to rely upon the language of the report as assurance that any fraud committed would have been discovered, and imposed damages to the amount of the loss. The judge, however, ruled that the damages assessed by the jury were excessive in relation to the fee paid to the auditor and reduced them to the amount of the fee.

CHAPTER II

PRELIMINARY ARRANGEMENTS

This chapter is devoted to consideration of the professional auditor's arrangements with a client for an audit engagement. This subject is important, as many audit engagements have gone wrong for lack of proper attention to details in the initial stages.

It is highly desirable that arrangements with the client be concluded early if possible; that is, before the closing date of the period for which the accounts are to be audited or the date as of which the audit is to be made. Aside from the matter of convenience to the auditor in making plans to handle his practice, an early engagement permits of making the necessary verifications of cash, negotiable instruments, and securities promptly at the balance sheet date, which is usually desirable, and may permit of further expediting the completion of the audit by doing preliminary work before the close of the audit period. As to corporations, the American practice of accountancy is at a disadvantage in not generally being favored as is the British with regard to the election of auditors by the stockholders in advance for the ensuing year.

In arranging with a client for an audit engagement, it is important that there be a definite understanding upon the following general subjects: what work is to be done; when it is to be taken up; requirements as to the report; and the fee to be charged. In the following paragraphs these matters will be discussed in some detail.

What Work Is to Be Done.

The professional auditor frequently finds that a client or prospective client has a vague conception of auditing work but has very definite ideas as to what he expects to accomplish by having an audit made. It is therefore incumbent upon the auditor to endeavor to ascertain the purpose of the audit and

then advise the client what should be done to accomplish that purpose.

If what is wanted is satisfaction that there are no errors or irregularities in the accounts, a complete audit is required. If the sole purpose is to give banks a certified balance sheet, a balance sheet audit will usually suffice. If it is desired only that some particular feature of the business or accounts be covered, a special examination should be made and the report should be specifically limited to consideration of that feature.

The point to be borne in mind is that the client should be given the service he needs to accomplish his purpose—no more, no less. Of course the client does not always communicate his reasons for having an audit made, in which case the auditor should use his best judgment, in view of what he may know of conditions, in deciding what should be done. There are very few cases, however, where the auditor does not have an opportunity, if he seeks it, to reach a full understanding with the client regarding the scope of the work.

If the auditor undertakes to suggest or to decide what should be done to satisfy the needs of the client, he should give full consideration to all conditions known to him or of which he can reasonably be expected to inform himself. One of these is the system of internal audit, which may be so complete that very little, if any, attention needs to be given to such matters as disbursement vouchers and detail costs.

Among the questions with respect to the work to be done which should be settled in arranging for an audit, or at least for a first audit, is whether all entries will be verified or the audit will be limited to tests. It is usually impracticable, on account of the time and expense involved, to check every entry and footing in the accounts and examine all vouchers, and similar papers, especially for a large business. Moreover, it is not usually necessary to do so, unless tests indicate that there are irregularities, in order to afford a reasonable degree of satisfaction that the accounts are correct. However, as there may be some risk in not verifying all entries (the risk usually varying with the percentage tested), the matter should be presented to the client so that if tests are made there will be no possibility of future misunderstanding. Sometimes there is a definite agreement as to percentages of tests, but those details are usually left to the judgment of the auditor. The question

of the adequacy of tests may depend largely upon the system of internal audit.

In arranging for an audit of a manufacturing or mercantile concern it is desirable to have an understanding regarding the verification of accounts receivable. In most cases the auditor can be absolutely assured of the validity of accounts receivable only by obtaining acknowledgments from the debtors. The next best procedure is for the auditor to send out statements of the accounts with the request that any differences be reported to him. Both of these methods, of course, require the consent of the client, or of some official of the concern whose accounts are being examined, at the time of doing the work, but it is desirable to have an understanding in advance on account of the cost to the client. In many cases the expense involved, especially in obtaining and checking positive confirmations, is so great that the client is unwilling to pay for the work, preferring to forego complete assurance of the correctness of the balances and to depend upon detailed examinations of the individual accounts, together with the other audit work which may be expected to disclose misappropriations of cash. This subject is discussed at length in Chapter IX (page 129 *et seq.*)

If the audit is a first one, it may be well to explain to the client in advance the necessity of examining the property accounts for an indefinite period in the past; also for inquiring into the organization of the company with respect to its capitalization and other pertinent matters.

It is often desirable to inquire of a client whether he wants attention given to the subjects of system and personnel.

When the Work Is to Be Done.

It is, of course, desirable to have an agreement with the client at the outset as to when the audit work should and can be taken up and completed. The client may require that the work be completed and the report rendered by a certain date. On the other hand, it is often necessary for the auditor to stipulate that the books are to be in balance before the audit is to be taken up, so that there may be no waste of time. In order to expedite the final closing of the books and the completion of the audit it may be necessary to do preliminary work before the end of the audit period.

For the purpose of detecting possible fraud, it may be desirable to do the work, or parts of it, at odd times, without notice, rather than at stated intervals. A cashier or treasurer may be able to conceal irregularities, at least temporarily, if he knows when to expect the auditor.

Only a slight extension of the application of the question of the time when the work is to be done leads to the broader subject of the period for which, or the date as of which, the accounts should be audited. If the auditor is on the alert to discover avenues of usefulness to his client he may find one by giving full consideration to the needs of the client in this respect.

It may be that the conditions indicate the desirability of an audit being made semi-annually, quarterly, or monthly, rather than annually; contrariwise, the period may be extended, and the expense thus reduced, without sacrificing any essential purpose.

It may be that the fiscal year of the concern is not consistent with what has been aptly called its natural business year. There are many concerns which, without thought on the part of the executives, use the calendar year as their fiscal year although their business is seasonal and the work of taking inventories and closing the books, and the consequent interference with the current work, may be greatest at December thirty-first. Moreover, a balance sheet as of that date may not show the business in its best light with regard to current financial condition.

The auditor is not doing his full duty unless, whenever appropriate, he brings to the attention of the client such practical matters as these which affect the economical and efficient execution of an audit engagement.

Requirements as to the Report.

It is always well to have an understanding with the client on the following points with respect to the report: whether there is any definite requirement as to the date of rendition; to whom it is to be addressed; how many copies are wanted and to whom they are to be delivered; and, possibly, whether there is any special requirement or preference as to content or form. The question of the content of the report is determined

largely by the understanding as to the scope and purpose of the work to be done, but it is often desirable to ascertain the wishes of the client as to whether the report shall be detailed or condensed, and frequently it is necessary to consult the client or his representatives, before the work is started or during its progress, regarding some feature of the report. The other matters relate only to the routine of carrying out the engagement.

The Fee to Be Charged.

While it is maintained that public accountancy is a profession and not a business, the accountant can ill afford to neglect the business aspects of his practice. It follows that in most cases he should have a definite agreement with his client with regard to compensation. It may also be necessary for him to demand payment in advance or during the progress of the work. Auditors have too often hastened to execute an engagement without adequate inquiry into the financial responsibility of the client.

It seems appropriate at this point to caution the auditor to make sure who his client is, in the sense of who is to pay his bill. Many a fee has been lost by an auditor's taking an engagement from a minority stockholder or other interested party with an understanding that the fee would be paid by the concern whose accounts were to be audited, later to find that the concern, whether or not in good faith, disclaims liability for the fee.

In taking engagements from municipalities and other governmental bodies, the auditor should satisfy himself that provision is made for the payment of his bill from some general or special appropriation. It is seldom safe to accept the assurance of an individual as a government official that the bill will be paid, be his intentions ever so good, as he is not likely to have authority to incur the expense and make the payment. The technicalities that may be invoked by government officials to bar the payment of bills are amazing to the uninitiated.

If the fee is to be based upon per-diem rates, which is the usual method, an understanding should be had as to the rates to be charged for the principal and for the respective classes of other accountants to be engaged on the work; also as to the charge to be made for the office work on the report. It is not

good practice to quote a flat fee, especially on a first audit, but as many clients insist upon it, a maximum may be quoted, based upon the experience on one engagement or upon a survey of conditions, with the understanding that it does not cover extensive investigation which may possibly be necessitated by the disclosure of irregularities. As most estimates of time are exceeded, it is always well to add a considerable percentage to a fairly liberal estimate. A fee contingent upon certain disclosures as a result of an audit is discountenanced by reputable accountants and by associations of accountants as being unethical.

The Record of the Engagement.

It is desirable that a record be made covering, in as much detail as necessary, the foregoing and all other matters germane to the taking of the engagement and the proper handling of the work. This record may be wholly or partially contained in a formal agreement or in correspondence with the client, constituting the auditor's authority and instructions, but is usually to some extent embodied in a memorandum made by the auditor at the time of taking the engagement, for his future reference and for the guidance of his staff, as showing his understanding of the terms of the engagement. Such a memorandum may be valuable in case of a dispute arising out of a misunderstanding regarding any point covered by it. In large accounting organizations, detailed memoranda, uniform as to subjects covered, are prepared for each engagement, and are supplemented by correspondence and perhaps other records relating to the engagement.

Chapter III

GENERAL PROCEDURE

The remarks in this chapter on the general features of auditing and the execution of an audit engagement apply essentially to complete audits, but in most particulars also to balance sheet audits. There should be no difficulty in determining whether or not a certain principle or method applies to a balance sheet audit as well as to a complete audit if the distinction between the two is clearly understood.

Distinctive Features of Balance Sheet Audits.

The procedure in a balance sheet audit is the same as in a complete audit except that, as the former is made for the sole purpose of determining the assets and liabilities at a given date, there need be no detailed examination of income and expense accounts nor of cash transactions during the period ended on that date. Making a balance sheet audit is tantamount to inventorying the assets and liabilities from authoritative sources. As stated in Chapter I (pages 7 and 8), that implies some examination, but not a systematic verification, of income and expense accounts.

The reason for being interested in the income and expense accounts in making a balance sheet audit lies in their relation to the asset and liability accounts; as, for example, the relation of the sales to the receivables and inventories; of the purchases to the payables and inventories; of the maintenance accounts, or the accounts to which such expense is ordinarily charged, to the book values of the corresponding property assets (unless appraised values of property are to be used); and of interest and miscellaneous income and expense accounts to the receivables, payables, and investments. These subjects will be covered more fully later. In other respects, the only accounts that need to receive attention in a balance sheet audit are the asset and liability accounts.

Preliminary Work.

Unless otherwise stated, the audit procedure outlined in this book contemplates doing all the work at one time. This will virtually always be done in the case of a balance sheet audit, but a complete audit covering a period may be divided into two or more sections so that the work is brought up to an intermediate date. Such work done in advance of the closing of the books for the period is generally known as preliminary work, and is, of course, different from monthly, quarterly, or semi-annual audits when the books are closed and the period is treated as a unit, even though it may later be combined with other similar units to show the results for a larger unit.

There can be no standard procedure for preliminary audit work, as the program should vary in accordance with the particular conditions in each case, but in general it may be said that the cash transactions and the income, expense, and property accounts would be verified to date, without taking off a trial balance.

How to Begin an Audit.

What has been said in the preceding chapter about the necessity for forethought in undertaking an audit engagement applies with perhaps even greater force to the execution of the work in the field than to the making of preliminary arrangements. The auditor should not rush heedlessly into the detail work but should take time at the outset to study all conditions which he can recognize as having a possible bearing upon the conclusions he should reach. The majority of auditors start to count the cash or take off a trial balance about as soon as they hang up their hats in clients' offices. They seem to be actuated in this partly by the idea, fallacious in most cases, that quick action is necessary to "tie things up," and partly by fear of being thought indecisive or unfamiliar with their work. The almost invariable consequence is that they remain absorbed in details and lose the advantages to be derived from a preliminary survey and a carefully considered program. The effect of this method of procedure, if carried through the various stages of the work, may be a narrowed vision and is

certain to be a waste of time and effort, which always results from an experimental or "trial-and-error" process.

If the business is new to the auditor he should acquaint himself with its physical operations as fully as practicable by going through the plant accompanied by someone who can explain the layout and procedure. He should make a general survey of the accounting system, including the auxiliary records. If the system is elaborate it is usually desirable to make a memorandum, for present and future use, of the principal books and records kept and of the names of the persons who keep them; perhaps also of various features of the clerical routine. For all large or fairly large organizations it is well to have a record in the working papers of the names of officers or others who are authorized to sign checks, notes, and drafts, approve vouchers, and so forth.

The Audit Program.

Before the detail work is started, or as soon thereafter as possible, the auditor should construct, or at least lay the foundation for, a complete program of general work to be done, outside of that called for specifically by the trial balance items. The basis for this program may possibly be found in the working papers for a preceding audit, which should always be thoroughly inspected when available.

Some accountants employ a standard form of audit program, for general use unless in any case it is obviously inappropriate. In the opinion of the author, the use of such programs is highly undesirable because it discourages initiative on the part of the accountant in charge of the work and because no two audits, of even the same business, present the same problems to be solved. The accountant should have had his training in the principles of auditing before he undertakes to make an audit, and when he does he should act largely on his own responsibility and judgment and not go out as a hack to do certain prescribed detail work, which may not be at all appropriate in that case, and sign his name on the dotted line.

With regard to audit programs the auditor will do well to observe these principles: that the same program should not be followed for two periods as far apart as a year without a new study of requirements; that caution should be exercised in fixing

the procedure for shorter periods; and that it is generally a mistake to lay down at the inception of an audit an invariable course of procedure for even that audit.

In making audits for short periods such as a month or quarter, where tests are made, it is often desirable to vary the program by selecting certain matters for particular attention at each time. In that way all accounts will be covered in some detail during the course of a year and more may be learned about each account than would have been if the surface of all the accounts had been scratched in regular periodical tests.

The form of audit program should provide for showing the names or initials of the persons performing the several divisions of the work, with full particulars as to periods selected as tests, and sometimes the dates when the work was done and the time required for its performance. The latter information is often necessary in supervising the work of the auditing staff and in fixing fees for future audits.

Working Papers.

The subject of working papers is very important to the auditor. It is so important, and, moreover, so extensive, that more than one book has been devoted entirely to it. For the author's views on the subject the reader is referred to "Accountants' Working Papers" by Palmer and Bell. With that complete treatise available it is thought to be unnecessary to discuss the technique of working papers in this volume except as it appears to be called for in the consideration of detail subjects. Too much stress cannot, however, be laid upon the desirability of limiting working papers to essentials. Mere transcripts of accounts serve no useful purpose. There is a great tendency to copy accounts and detailed schedules when in most cases all practical purposes would be served by checking the client's records. On the other hand, care must be exercised not to carry condensation to extremes.

It may not be amiss to mention here an aspect of the subject of working papers which is at times very important to the professional auditor and which does not have to do with technique; namely, the proprietorship of working papers. Auditors generally hold, upon the advice of good legal counsel, that the papers prepared by them during the progress of their

work are their property. Occasionally, however, courts have replevined such papers upon representations by clients that the papers belonged to them and were unlawfully retained by the auditors. So far as the author has been able to ascertain, no legal resistance has been made by an auditor to such a claim, which might involve being adjudged in contempt of court, so that no test case has been tried.

Throughout the progress of the work the auditor should make notes, in an orderly manner, of all things that come to his attention, from his detail working papers or otherwise, that may prove to be material for his report or for informal discussion with the client. This applies to matters of system and personnel as well as the accounts.

Marks in the Books.

Check marks or "ticks" should not be made in the books or on the client's papers indiscriminately, and when they are made they should be as inconspicuous as possible, except perhaps on vouchers, as explained in Chapter V (page 65).

It is desirable, if practicable, to conceal from the office force the extent to which the records are examined in detail. In checking vouchers, postings, and footings in sequence it is seldom that any mark more conspicuous than a dot is necessary. The audit program is the logical place to record the work done, not the books themselves. Further, the bookkeeper may object to having his records defaced by an auditor's marks.

Whenever check marks are used they should be as distinctive as possible, and preferably changed from time to time, although the only effectual means of guarding against interference by the office force with any auditing process lies in the physical control of the particular records until the process has been completed, rather than in the use of marks on the records.

Adjustments.

Any entries necessary to adjust the books in accordance with the auditor's findings should be made on the books at the conclusion of the audit if there is no disagreement between the auditor and the client with regard to the propriety or expediency of making the adjustments. As will be seen in the

following chapters, the author favors reducing the auditor's adjustments to the minimum, that is, rectifying only such errors as are relatively serious; but it is highly desirable that the client be informed of such adjustments as are made and that effect be given thereto on the books, so that the balance sheet will agree with the books and thus obviate any future misunderstanding or the necessity of continuing to apply the adjustments in future audits.

If it is impracticable to record the adjusting entries on the books at the time of the audit, a list of the entries should be furnished to the client, either informally or in the report. If there is any disagreement as to the necessity for the auditor's adjustments, and he maintains his position with regard thereto, it is usually desirable to include in the report at least a reconcilement of the surplus or capital as shown in the balance sheet with that shown in the books, with particulars as to the reasons for the adjustments.

Order of Taking Up Work.

What will be said about the order in which the various parts of the audit work should be taken up is predicated upon the hypothesis that only one part of the work may be done at one time. The application to different conditions, when more than one accountant is engaged on the work, should not be difficult.

Verification of cash, negotiable instruments, and securities.—When the visit is unannounced it is nearly always desirable to count the cash and inspect any negotiable instruments and securities as soon as possible. This should also be done if the work is begun promptly at the end of the period to be audited, or if it is practicable to make a special visit at that time. Sometimes, as in the case of financial institutions, securities may be kept under control in a vault pending the completion of the verification of cash, loans, and similar assets which change more rapidly. Of course there are many cases where the cash on hand and other readily convertible assets are negligible, when no advantage is to be derived from their early verification. The principal consideration is that due precautions should be taken to prevent the covering up of shortages through the same asset or its equivalent being submitted for

examination twice. This matter will be covered more fully later.

The general ledger trial balance.—Unless it is desirable, for the reasons stated above, to give attention first to the verification of cash and other readily convertible assets, it is usually advisable to draw off a trial balance of the general (or private) ledger as soon as the books are closed and balanced. It may not be necessary to wait until all the final adjusting entries are made, but if time would be wasted in making subsequent adjustments it is better to postpone drawing off the trial balance and proceed with the miscellaneous verifications.

In the last analysis, all auditing work is based upon the trial balance of the general ledger; that is, it all has to do, directly or indirectly, with the accounts which are reflected in the trial balance. A fairly good knowledge of the business can be derived from the inspection of the accounts which is necessarily made in drawing off a trial balance. It follows, then, that it is generally desirable for the auditor himself, especially if it is his first experience with the accounts, to draw off a trial balance of the general ledger as early as practicable.

It is not satisfactory to check the client's trial balance, as the auditor should always retain a trial balance in his papers, it being the veritable "backbone" of the working papers; nor is it usually satisfactory to try to utilize a copy of the trial balance made by the client's staff unless it is prepared on paper suitable for the auditor's requirements. The auditor must check the figures in any event and must inspect any accounts that have been opened and closed during the period, and it is thought that the little additional time required to write the names of the accounts is compensated for by the greater familiarity with the accounts gained by close personal inspection.

If the accounts are being audited for a certain period, rather than as of a certain date, it is desirable to draw off a trial balance at the beginning of the period as well as at the end, with respect to the asset and liability accounts, so that all changes in the accounts during the period will be disclosed. The balances at the two dates should be shown on the sheets in parallel columns.

Also, in an audit for a period, the trial balance should usually be drawn off "before closing," that is, before the

nominal accounts are closed into the profit and loss or surplus account; or, if the closing entries have been made, they should be ignored. If the trial balance is drawn off after closing it will consist of the balances of asset and liability accounts only, and it is necessary to make a supplemental series of working papers for the profit and loss accounts. In the author's opinion, which is based upon his experience and that of others, it is preferable to have one trial balance, to include all accounts in which there have been entries during the period (with the possible exception of some temporary accounts), and consequently only one series of supporting working papers.

In a balance sheet audit it is usually necessary only to draw off the balances of the asset and liability accounts at the date as of which the audit is being made.

For a trial balance to be used in an audit for a period, provision should usually be made for showing the following:

Ledger folio.
Name of account.
Reference to supporting papers.
Balance at beginning.
Balance at end, per books.
Adjustments—Increases and decreases (may be in one column, increases in black and decreases in red).
Balance at end, as adjusted.
Remarks.

It is usually desirable to divide the trial balance into four sections—for assets, liabilities, profit and loss debits, and profit and loss credits. If there are only a few accounts, and especially if it is expected that the character of the balances of some accounts may be changed by adjustments to be made, it may be desirable merely to list the balances in parallel columns or on separate sheets for debits and credits, and later to extend the adjusted balances into columns for assets, liabilities, profit and loss debits, and profit and loss credits.

If there is a private ledger as well as a general ledger the trial balances of the two may be combined by eliminating the controlling accounts for each other, or the trial balance of the private ledger may be made a schedule supporting the controlling account therefor in the general ledger.

The technique of the preparation of trial balances is more

fully covered in "Accountants' Working Papers," previously referred to.

Confirmations.—If the audit will require only a short time it is desirable to send out any requests for confirmation of accounts as soon as practicable, so that responses may be received before the work is completed and the auditor has departed. Such requests should not be sent out, however, until the auditor is fairly certain that the information requested is adequate. It may be, for example, that a certificate has been requested from a bank as to the concern's balance and loans at a certain date and later investigation has disclosed that the cash receipts on that day were not deposited until the next day and that the bank holds collateral to the loans, both of which matters should have been embodied in the certificate requested. The subject of confirmations will be fully covered later.

Minutes, etc.—An important part of an audit of a corporation is the inspection of the minutes of meetings of stockholders and directors, and possibly of special committees such as an executive committee and, in banks, a loan committee. In a first audit it is also necessary to inspect the certificate of incorporation and by-laws. Excerpts from all these, showing in concise form the matters pertinent to the audit, should be made for the working papers.

This work is often left to the last, but it should be done early, even though it is necessary to refer to the excerpts later, as the auditor may thereby be apprised of specific matters that require investigation in the examination of the accounts. The corporate acts for which general or specific authority should be found in the by-laws and minutes include the following: signing of checks, notes, and drafts, declaration of dividends, fixing of officers' salaries or other compensation, making of advances to officers and others, issuance and retirement of securities, execution of important contracts and agreements, and appropriations for construction and other purposes. It is sometimes also desirable to verify the payment of directors' fees by ascertaining that as many directors as were stated to have received fees were actually present at the meetings, as evidenced by the minutes.

The by-laws or minutes may include a covenant or agreement stipulating that a certain ratio of net current assets must be maintained or certain reserves created before dividends can

be declared, or even prescribing the method of valuation of inventories. Such restrictions are, however, uncommon except where there is a bond issue, when they are evidenced by the mortgage or trust indenture. This document should always be *read by the auditor and excerpts therefrom carried in the working papers and regarded as of no less importance than the by-laws. Any failure to observe its provisions should be reported.*

If the auditor is not permitted to inspect the minutes of governing bodies or other similar documents he should so state in his report, *so that he will be protected* in the event of the later discovery of any errors or omissions in the accounts which would have been disclosed through their inspection.

In the case of a partnership, the partnership agreement should be inspected. As to small businesses, where there are only two or three partners, there may not be, however, the same necessity for doing so that there is for examining the agreements for larger concerns or the by-laws and minutes of a corporation, as the auditor can usually satisfy himself as to all important particulars of the agreement by oral inquiry and, the records being open to all the partners, there is little likelihood of anything being done that is contrary to the agreement.

Features of a partnership agreement that may be of interest to an auditor are generally as follows: the amount of capital invested by each partner; whether or not such capital is to be kept intact or may be reduced by withdrawals; the proportionate interest of each partner in the profits; whether or not interest is to be credited on capital invested, or on the balance of capital left in the business, and charged on withdrawals; and whether or not salaries are to be paid to partners, and if so, the amounts.

Branch auditing—home office instructions, etc.—As the officials of a corporation are controlled and guided by its certificate of incorporation and the actions of its stockholders and directors as expressed in the by-laws and minutes, the management of a branch is governed by the instructions issued by the home office. It will be seen, therefore, that before undertaking to determine what has been done by a branch it is necessary to learn what should have been done. It is generally even more important for an auditor to determine that the manage-

ment of a branch has carried out the instructions of the home office than to determine that the home office officials have followed the instructions of their governing bodies. The reason for this is that the branch is more remote from the supervision of the higher executives.

In this connection it may be stated that in the auditing of branches, especially foreign branches, particular attention should be given to the matter of compliance with the local laws. For example, some foreign countries prescribe what books shall be kept and require that certain books be "rubricated," or stamped, by government officials in order to be admissible as evidence in court.

Subsequent procedure.—Having laid a good foundation for the audit work by studying the situation, preparing an audit program, drawing off a trial balance of the general ledger, and inspecting the minutes and similar records, and having verified such assets and done such other work as may have required early attention, the auditor may proceed with the detailed analysis and checking of the accounts and records. The order of procedure from this point on is not important. In fact it is usually not advisable to plan a definite sequence of operations, as there is likely to be interference on the part of the office staff in the form of a demand for the use of certain books. The auditor should not overlook the fact that he is an outsider, and he should always, within reason, adjust his requirements to meet the convenience of the office staff.

Division of the Work between Senior and Junior Accountants.

The economical conduct of an audit requires that two or more accountants be employed whenever the amount and character of work to be done justify it; and in the majority of audit engagements that condition exists. There are two general classes of accountants, which are usually designated as seniors and juniors—the distinction applying to experience and ability rather than age. There are also, of course, principals, or accountants practicing for themselves, whether or not employing others, and in large professional organizations there may be a class designated as supervising accountants, who supervise several engagements simultaneously, and the juniors

may be further classified according to their experience and ability, some of them perhaps being called "semi-seniors."

There is a great deal of hard work, some of which is of a clerical character, to be done in most audits. This clerical work is often regarded as drudgery, or to say the least, mechanical, but it may be said that the young aspirant for success in accountancy who does not take a lively interest in such work, not to mention recognizing its importance, had better change his vocation. To be sure, unremitting application to any task such as footing columns of figures and checking postings tends to dull the mind, and for that reason it is necessary to alternate such operations, but when that is done there is no part of auditing work which should seem irksome to one who has a natural aptitude for accountancy and may be expected to succeed in it.

Manifestly, when there is any considerable amount of work to be done in an audit which can be done as well—possibly better, because faster—by a comparatively inexperienced person, the proper consideration of time and expense dictates that the senior accountant confine his attention to such matters as he is best qualified to handle, delegating the other work to one or more juniors and supervising its performance. It is impossible to formulate any definite procedure governing the division of auditing work between the senior and junior accountants for the reason that conditions in different audits vary so greatly. For example, the situation may seem to call for a highly experienced senior and a junior, but there may not be available working space for two persons in the client's office; or the client may want one certain person (possibly a principal) to do all the work, or supervise it; or the appropriate class of accountant may not be available in the accounting organization at the time; or there may be special necessity for haste in completing the work; or there may be other reasons which lead to the employment of only one accountant, or of two seniors or "semi-seniors," or of a senior and two juniors. There are, however, certain commonsense principles governing the division of the work under conditions prevailing generally, which will now be outlined along broad lines.

The work of the senior.—All contact with the client or with the executives of the concern whose accounts are being audited should be through the senior. Obviously, if the senior is in

the employ of another, all important matters should be brought to the attention of the principal, and presented by him to the client—what is important in any case depending upon the circumstances.

The senior will survey the situation and decide what work should be done and the order in which it is to be taken up. He will prepare the audit program and assign to each junior the work to be done by him. In connection with the assignment of work the senior will outline the methods to be pursued and the form of any working papers or statements for the report. He will watch the progress of the work and review all tangible evidences of the work upon its completion or otherwise satisfy himself that it has been properly done. He should aim to educate the juniors in his charge as far as practicable in view of the limitation of time that may be devoted to efforts in that direction while employed at the expense of a client.

The senior should pass upon all matters of accounting principle involved in the audit, and should make or review all adjustments of the accounts that may be necessary. He should himself inquire into such matters as the valuation of merchandise, the propriety of charges to capital accounts, and the adequacy of reserves and tax accruals, all of which are discussed in detail in subsequent chapters. He should read the minutes and all important documents such as partnership agreements and mortgage indentures.

The senior will do well to draw off the trial balance of the general ledger himself. He will usually at least assist in the verification of cash balances, negotiable instruments, and securities. When there is only one junior, the senior will work with him in such operations as are best performed by two persons—for example, the checking of postings.

The senior will finally write the report, possibly with the assistance of the junior. With that object in mind, he will make notes during the progress of the work of any matters which come to his attention and are thought likely to be subjects for treatment in the report. The importance of this matter cannot be exaggerated. If possible the draft of the report should be reviewed by another person before it is typed and rendered to the client. The subject of reports is discussed in Chapter XVII.

The work of the junior.—The junior is, of course, a subordinate of the senior. He is therefore responsible directly to the senior for his work on the particular engagement, whether or not he is an employee of the senior. His duty is to carry out the directions of the senior, regardless of his personal views as to the wisdom of the procedure he is instructed to follow, although the senior will do well to encourage free discussion of any debatable points as far as practicable and not assume an arbitrary attitude toward his assistants.

The work assigned to the junior is manifestly that requiring less technical knowledge and skill than are possessed by the senior. If there are two or more juniors employed, the assignment of work to them will be made according to their respective ability and experience. For the purpose of the following general discussion it will be assumed that only one junior is engaged in the work.

In most complete audits the junior will make the examinations of the original records and supporting documents as outlined in the three succeeding chapters; that is, the records of sales, vouchers, and cash receipts and disbursements, including any auxiliary records such as pay-rolls. The journal may be examined by the junior or the senior, depending upon the extent to which the examination is carried, the nature of the entries, and the accounting system. The junior will make all verifications of footings of the original records and ledgers. He will verify postings, but usually, as aforesaid, with the assistance of another.

The junior will draw off trial balances or schedules of the subsidiary ledgers or other records supporting general ledger balances, such as accounts, notes, and acceptances receivable and payable. He will verify the computations of inventories and make such examination of values as the senior may direct. He will usually verify prepayments, such as unexpired insurance, and accruals of income and expenses. He will prepare confirmation forms, at least where there are many; mail them; and check them when they are returned. He will look up vouchers or other records required by the senior and generally assist the senior in the preparation of analyses and schedules. He may count the cash, notes receivable, and securities, although in any but a large audit such work will usually be done, or at least closely directed, by the senior.

The junior should, of course, co-operate wholeheartedly with the senior, reporting to him, and to him only, any observations regarding the audit work or related matters. He should especially avoid any conversations with the office force or executives on such subjects as apparent fraud, his views as to defects in the accounting system or methods, and personal matters relating to the client's organization or his own.

CHAPTER IV

THE ORIGINAL RECORDS

This chapter and the two succeeding chapters are devoted to discussion of the systematic examination of books and records of original entry which is usually undertaken only in connection with a complete audit. This division of the general subject of auditing has been described as "Auditing up to the trial balance." There are also included in this chapter some observations on auditing methods generally.

Auditing from the Trial Balance and from the Original Records.

The auditing of the specific accounts appearing in the trial balance, which is discussed in later chapters, may be said generally to proceed backward from the general ledger to the records of original entry. This process is usually supplemented to some extent by the verification at their source of some entries representing groups of similar transactions and by tracing those entries forward into the general ledger accounts affected.

These two methods of procedure will be illustrated in their application to the audit of charges to an expense account originating in the voucher register. If all vouchers have been examined and checked to the voucher register, as to total amount and as to distributions, and if the footings of the voucher register have all been proved and the postings to the general ledger all checked, it will be established, among other things, that all charges to the expense account represent expenditures properly approved. Even then, however, when that particular expense account is reviewed critically it may be found, for example, that the charges in certain months are unusually large, and it may be necessary again to refer to certain vouchers for the explanation. It will be seen that the general examination of vouchers has merely laid the

foundation for, or supplemented, the audit of the particular account.

Some auditors confine their procedure to examination of the original records and to tracing the entries therefrom to the general ledger accounts. This may be designated as the "checking" method. Others devote nearly all their time to examination of the entries in specific general ledger accounts, tracing those entries, or certain of them, back to the original records; this may be termed the "analysis" method. The exclusive employment of either of these methods is unsatisfactory. What is needed is a judicious combination of the two.

Perhaps the greatest objection to the exclusive use of the "checking" method is that it is likely to result, through its effect upon the auditor, in the merely mechanical performance of the work, which contravenes every principle of auditing. Further, as exemplified in the foregoing illustration, the limitation of auditing to the examination of original records, even though such examination is complete and thorough, may fail to disclose important facts. The inadequacy of such checking is even more apparent when the original records are only tested, that is, when only part of the entries are examined.

On the other hand, the exclusive employment of the "analysis" method is likely to result in lack of thoroughness or in waste of time in investigating and recording in the working papers the source of many entries of the same character, which entries could more expeditiously be investigated at one time without any record being made in the papers.

Tests.

It is seldom practicable, or necessary, to examine all entries in all accounts. If good judgment is exercised in the selection of the number and variety of entries to be examined the auditor will be fairly certain to discover some evidence of any fraud or of material errors that may exist. The justification for testing rests largely upon the probability that irregularities are recurrent; that, once committed, they will be repeated.

If the tests made have led to the slightest suspicion of fraud or have indicated the existence of many errors it will, of course, be necessary to extend the scope of the audit to follow

up the clues, and it may even be necessary to check every entry. In such a case, if there has been an understanding with the client regarding the cost or probable cost of the work, which has been based upon the making of tests, the situation should be brought to the attention of the client and his approval obtained before proceeding with the more detailed audit.

In deciding upon the proportion of items to be examined as tests, consideration should be given to the probability of there being any irregularity or serious error in the particular records. For example, there may be such good internal control over the handling and recording of cash that it would be virtually impossible for anyone to misappropriate cash that had been recorded as received, and therefore the audit of the records of cash receipts and disbursements may properly be restricted to a low percentage of tests; but, on the other hand, inadequate attention may be given to the accounting for sales, so that it would be comparatively easy for an employee to misappropriate merchandise or fail to account for the proceeds of sales, in which case the merchandise and sales records would need to be audited in as much detail as possible. As a further example, it may be known that clerk *A*, who keeps one record, is intelligent and careful and therefore makes few errors, while clerk *B*, who keeps another record, is inclined to be negligent. Manifestly, more attention will be paid to *B's* work than to *A's*.

The auditor should, of course, be careful not to allow these apparent differences in probabilities to influence him exclusively in planning his work. It would not be safe to slight any feature of the work on the ground that there was very little likelihood of there being anything wrong in that respect. No part of the usual procedure of an audit should be completely dispensed with unless an understanding to that effect has been had with the client.

The auditor should be careful not to be misled by indications of internal control when in fact it may be non-existent or purely perfunctory. The office personnel may include an "auditor" but it does not follow that there is any effectual control over even the disbursement of cash. The author knows of one case where the only auditing done by an "auditor" (so-called to comply with the requirements of a bonding com-

pany) was the periodical counting of the cash on hand and examination of the petty cash vouchers.

In the absence of unusual conditions affecting the opportunity for fraud and the likelihood of serious error, it is thought that from twenty to forty per cent of the entries in the general ledger accounts should be selected to be examined in detail, by one method or another, in connection with a complete audit. There are, of course, certain accounts such as the property accounts that will generally be examined more completely.

The tests should not always be confined to the entries for certain months. It is usually satisfactory to select from one to four (not consecutive) months' entries in the original records and examine them all, down to the smallest item, but this should be supplemented by a random selection of other items in the accounts, usually the larger items. When a selection has been made it should be followed up persistently, regardless of the difficulties; otherwise the principle of testing is completely vitiated. If, for example, a voucher selected for test cannot readily be located, the auditor may be tempted to abandon it and select another, but that very item may be the object of his search for irregularities, and failure to account for it may constitute a culpable waste of opportunity.

While it may be known to the office force that not all items are examined, they should, if possible, be kept in ignorance as to what particular items have been examined and of the proportion thereof to the total number. For this reason it is always desirable, though comparatively seldom practicable, for auditors to do their work where they cannot be closely observed by the office force. Unless the working conditions are such that the office force would recognize it as an obvious effort to delude, the auditor should endeavor to have all original records placed at his disposal at the beginning of the audit so that he will not have to disclose to the office force to what extent the several records are examined. As previously stated, it is better not to make "ticks," or check marks, on any book or record unless it is necessary to do so for the auditor's own information.

Footings.

The extent of the verification of footings should be governed by the general principles of testing as stated in the foregoing. There is, however, another consideration, that as to footings the testing principle may be applied not only to the number of items to be verified, but to the extent of verification of each item. In the verification of footings, as in no other process of auditing, it is possible and proper, under most conditions, to take a short cut.

In the ordinary routine of auditing it is seldom necessary to extend the verification of footings to the cents. This curtailment may safely be practiced in all footings which are being checked for verification purposes only, with the possible exception of some cases where irregularities are suspected. Dropping the cents will usually be found to result in a saving of labor in the footing of such records as cash books, sales records, voucher records, inventories, and pay-rolls, and there should be no objection to applying it to ledger accounts and clients' subsidiary ledger trial balances, when the latter are footed, if any saving of time will be effected.

In most cases all the practical purposes of footing can be accomplished by starting with the dollar column and thus arriving, with proper care, at a forwarding figure which will ensure accuracy in footing the next, or ten-dollar, column. In some cases, notably inventories, it may be satisfactory to drop another column and accept everything under one hundred dollars. A little practice will enable a person to arrive at the right figure to add to the footing of any column of figures to give the correct forwarding figure.

In applying this rule so generally to original records, subsidiary ledgers, and clients' trial balances thereof, it is not meant that the auditor may entirely overlook small differences, but if the footings as shown are those called for by the controlling accounts or records it is generally a waste of time to look for errors or manipulations of small amounts in the footings. An error in the footing, or forcing of the total, of a general ledger trial balance will be detected by the auditor in drawing off his own trial balance; if for some reason the auditor does not draw off one himself, it will, of course, be necessary to foot the client's trial balance completely.

It is regrettable that so few accountants nowadays are proficient in the simple arithmetical process of addition. This deficiency is due to the widespread use of adding machines. The young man who takes up public accounting is soon confronted with what seem to him to be miles of figures which he must foot without a machine, and if he cannot do it accurately and with reasonable rapidity he will be displaced. The junior accountant, or one who aspires to become such, should *never use an adding machine unless the figures must be listed as well as added.*

The popular conception of an "expert accountant" a few years ago was that of a "wizard at figures," and that impression still prevails to a large extent. While the possession of such qualities by accountants generally has always been mythical, it is true today, no less than in the past, that, other things being equal, the accountant who is rapid at figures has the advantage over the one who is not.

The amount of footing that should be done on the several original records depends upon the extent to which the records need to be tested in other respects, in accordance with the principles outlined under the head of "Tests." It is well to foot the last page of the several original records for every month, or nearly so, perhaps omitting other pages in proportion, as the final totals are most likely to be falsified. The cross-footings of distribution columns for the month should be proved. The footing of subsidiary ledgers will be discussed under their respective headings. The footings of the general ledger accounts should usually be tested in about the same proportions as the postings are tested; it follows that if it is deemed necessary to check all the postings, all the footings should be proved.

In proving the footings of ledger accounts it is, of course, necessary also to prove the balances by deduction of the total of one side from the total of the other. As will be shown later, in the discussion of the auditing of specific accounts, it is very often possible and desirable to prove the balances of accounts otherwise than by footing the accounts themselves.

Postings.

Consideration of the subject of verification of postings involves two processes, namely: (1) the somewhat incidental

verification in connection with the tracing of entries to their sources in investigating and classifying certain charges and credits to the accounts, and (2) the systematic checking to or from the original records for the definite purpose of proving that the entries originated in the sources indicated.

The number of postings that need to be verified by the systematic checking process is affected by the extent to which the entries are otherwise examined. But the latter process is rather less discretionary than the former, so that in most cases the effect of the application of the general principles enunciated under the head of "Tests," as to the procedure being conditional upon the probability of irregularities, will be the fixing of the proportion of postings to be checked systematically.

The systematic checking of postings is most expeditiously done by two persons, one calling to the other. As this process is tiresome at best, it is desirable to relieve the monotony as much as possible by having the two persons alternate in calling and checking and by an occasional complete change in occupation for both of them; otherwise the work may degenerate into purely mechanical routine.

It seems fitting at this point to utter a warning against the auditor's permitting himself to become an automaton. If there is one pre-eminently essential quality of the successful auditor it is mental alertness. As all human beings are subject to lapses of alertness in the performance of routine tasks, the auditor should so plan his work as to avoid long periods of application to duties which do not constantly stimulate mental activity. The length of time that may safely be devoted continuously to one task without its becoming mechanical depends upon the individual.

There are two methods of checking postings—forward to the ledger and backward to the original record. If, for any special reason, all postings are to be checked, it makes no difference which of these methods is adopted, except for purely mechanical considerations in view of the conditions in the particular case. If tests are to be made, it is thought to be more logical generally to check from the ledger to the original record, because, as aforestated, the object is to prove the authenticity of the entries as having originated in the sources indicated.

In accordance with the general principles enunciated under the head of "Tests," this procedure may be varied so as to verify the entries for one or more months completely, which will more readily be done by checking from the original records to the ledger, but this process should be regarded as merely supplementing the general practice of selecting entries in the ledger to be checked to the original records. If it has been decided to verify, say, one-quarter of the postings, it is better to check one month's entries completely to the ledger and approximately the equivalent of two months' entries, selected at random from the other ledger postings, to the original records, than to check three months' entries completely to the ledger.

If it is desired to check all the postings for a certain period (whether a year or a month) it will be necessary to place a distinctive check mark or "tick" after each item checked, both on the ledger and on the original record, and upon completion of the work, to examine each entry in the record or records to which the postings have been checked, the ledger or the original records, to ascertain that all entries have been checked. It is, of course, desirable to keep the records under physical control during the course of this procedure. It is not usually necessary to make such a search for unchecked items when the postings are merely tested as to individual items, or in fact to make any check mark unless it is thought that the tests may have to be extended.

The Journal.

The journal is the first original record to be discussed in detail, not because it is a fundamental record but because it is, or should be, different from all the others. There are, of course, so-called cash-journals, purchase journals, sales journals, and perhaps several other varieties, but the best modern usage, as applied to most businesses, gives the journal a distinctive place as the source or medium of adjusting and closing entries, with as few as possible strictly original entries of transactions.

The proper use of the journal varies with the kind and size of the business. If it is unusual in a certain business to make sales of commodities, and such a sale is made, it will have to be

recorded in the journal. On the other hand, it is perhaps generally customary to enter in the journal special allowances to customers, but if the number of such allowances becomes considerable, credit memoranda will probably be issued for them, which will be entered in the sales record or in a record specially designed for the purpose. Entries of notes received in settlement of customers' accounts are usually made in the journal, but if the business is such that many notes are taken a special record will be used.

Such a record as the latter would usually be regarded as an auxiliary journal, and the monthly totals might be entered in the general journal for posting to the general ledger. In fact, it is quite common practice for the totals of such records as those of purchases and sales to be journalized, but there is generally no good reason for doing so; the posting of all original records, including any auxiliary records such as above described, may as well be made directly to the general ledger. The discussion of journal entries here will comprehend all entries other than purchases, sales, and cash receipts and disbursements.

There are several forms of journal; in fact there may be no record specifically described as such. The variations in form are generally as follows: (1) the ordinary two or three column form; (2) the multicolumnar form, where special columns are provided for the commonest classes of entries; (3) separate "journal vouchers," not entered in a book, to which are attached any supporting papers (there may be such "vouchers," separately filed, in either of the first two forms of records described); (4) a combination record in which "cash vouchers" and "journal vouchers" are entered, being differentiated by symbols—which usually means merely the utilization of the ordinary voucher record for journal entries as well as for vouchers representing purchases and expenses.

The examination of journal entries, in whatever form, presents few problems. It is important to see that entries setting up liabilities have proper support, as though they were made through the voucher record. In the systematic examination of journal entries those setting up assets may not require the same attention as do those for liabilities, as the verification of the balances in the asset accounts will usually comprehend examination of such entries; however, if the journal

is used in lieu of a sales record, or otherwise as a medium for charges to accounts receivable, the same care should be taken to determine that all charges have been made as would be taken if the charges were entered in a regular sales record.

Special attention should be given to entries writing off or reducing asset accounts, especially notes and accounts receivable, as it may be possible to conceal misappropriations of cash receipts by crediting the accounts through the journal for allowances or writing them off entirely as uncollectible. Fraudulent disbursements may also be concealed by making unauthorized credits for salary or expenses to accounts receivable from officers or employees which represent cash advances; the principle here is the same as that involved in the verification of entries setting up liabilities, except that in this case the cash has been paid in advance. In every well regulated business it is required that there be executive approval of entries for losses and that all charges to cost and expense accounts shall follow the same procedure so that all may be subject to the same safeguards.

As to the extent of the systematic verification of journal entries, the principles enunciated under the heads of "Tests" and "Postings" apply. It is desirable to scan the journal for a considerable part, if not all, of the period which has not been covered by the complete verification.

The Sales Record.

The word "sales," as used here and later, refers not only to sales of commodities, but also to sales of service, such as are made by public utility companies, by hospitals, schools, and other institutions, and by professional men or organizations, such as accountants, lawyers, architects, and engineers.

There are two classes of sales to be considered; namely, credit sales and cash sales. The only essential difference between these, from the viewpoint of the auditor, is that the former have to be accounted for as charged to customers and the latter as received in cash.

There are many forms of sales records, involving mechanical devices, such as cash registers and elaborate billing and recording machines, but the various forms resolve themselves into two general classes. As applied to manufacturing and

mercantile concerns, these forms are as follows: (1) a record in which each sale is entered from either the duplicate invoice or order form or the duplicate cash sale slip; (2) the duplicate invoices and cash sale slips themselves, supplemented by adding machine lists or summaries of totals taken from billing machines and cash registers. Of course there are many retail business concerns which keep no record of cash sales that may be audited, and very unsatisfactory records of credit sales. The cash receipts of companies such as railways are evidenced by reports which have been summarized after verification at the source so far as conditions permit.

Cash sales.—As to cash sales, the auditor should investigate the system to determine whether or not there are proper safeguards. If the system appears to be adequate, and the volume of transactions is considerable, the auditor should usually limit his verification to checking certain of the summaries against the totals of cash sales as recorded, without examining the detail sale slips or footing the items. If the system of control appears to be inadequate, and the volume of transactions is great, he should report the condition to the client before proceeding with a detailed examination, and if instructed not to pursue the matter further he should so state in his report; if the volume of cash sales is not large he should usually make some tests of the footings and possibly of the evidence supporting the detail record.

Credit sales.—In the examination of credit sales, the auditor should not lose sight of the real objectives. These are as follows: (1) determining that all sales as evidenced by the detail records have been charged to customers; (2) supplementing the examination of accounts receivable by determining that all charges to those accounts actually represent sales as shown by the detail records. It is not intended that this will imply departure from the principles of testing; on the contrary, it may extend the application of those principles. What has been stated as the second objective may be entirely unnecessary if the balances in accounts receivable are to be confirmed by the customers; or at least it will be necessary in that event only to examine the evidences of charges that are not confirmed.

Assuming that it is necessary to examine the sales with respect to both undercharges and overcharges to accounts re-

ceivable, the duplicate invoices (if there are such) should be inspected to the extent of ascertaining that they are regular, and checked to the record or summary and the totals proved and checked to the general ledger, for as many months as are determined upon, with such supplementary tests of entries in other months as may seem desirable. If the invoices are numbered, the auditor should account for all the numbers in certain months.

If the accounts receivable are to be confirmed, fewer invoices may be selected for examination but the checking should originate with the invoices. Any examination of the invoices for the purpose of determining that all have been entered is inconclusive from the standpoint of the detection of fraud unless the invoices are numbered and all the numbers of certain months are accounted for, as it is likely that under other conditions if an invoice has not been charged to the customer it will have been abstracted and the auditor will not see it. However, the auditor would not be justified in assuming that unless the invoices were numbered all examination thereof was futile.

It is usually desirable to examine particularly the invoices entered in the last few days of the period, with a view to determining that the goods were actually shipped during the period and were not on hand, and possibly included in the inventory, at the end of the period. Business executives are often unduly influenced by a desire to make a good showing as to profits or financial condition and hold their sales records open after the end of a fiscal period for the purpose of including some subsequent shipments. There are also cases where sales for the latter part of a period are deliberately "padded"; that is, made to include fictitious transactions, with intent to defraud the public or stockholders.

It is thought that unless there is some evidence of irregularity, the auditor need not extend his investigation back of the invoices; but if the records show greatly increased sales during the latter part of the period, or greatly decreased sales during the early part of the succeeding period, which are not properly explained by the activities of the business, or there are other indications of irregularities, the examination should extend to the shipping records and perhaps to the order files. Obtaining confirmations of customers' balances at the end of

the period might not disclose the fact that invoices were predated so as to include them in the sales for the period, or even that fictitious charges were made in the last days of the period to customers with active accounts, for the reason that if the charges were not confirmed by the customers the failure to confirm would be assumed to be due to the shipments being in transit, unless the amounts were unusually large or there was some other reason for special investigation.

It seems appropriate at this point to state that cases where the accounts are deliberately falsified at the direction of the higher executives are rare, with the possible exception of the taking and valuing of inventories, and that the auditor is justified in assuming generally that no such condition exists, unless the proper exercise of the acumen which is expected of him leads to suspicion of irregularities in that direction. The auditor should always, however, be careful to discriminate between the executives who represent the owners, and who should therefore be above suspicion, and other officials whose personal interests may be paramount. A profit-sharing arrangement may furnish sufficient inducement for making a temporarily good showing. This applies particularly to managers of branches and heads of departments.

It may be stated generally that overstatements or understatements of profits arise, not through intentional misrepresentation on the part of the controlling executives, but through errors and the failure to observe correct accounting principles. This should not be confused with reductions of profits through misappropriation of funds, which are usually permanent but may be only temporary if restitution is made later. All other influences upon book profits are only temporary—except in the rare event of a failure to record the receipt of an available asset which would increase the profits. There are, of course, cases where accounting principles are violated to such a degree that the actions of the officials in that respect appear to be devoid of principle, but the significant point is that such actions are not usually hidden from the auditor, and he is afforded the opportunity to judge the accounts according to accounting principles and the accuracy of their application.

To return to the specific subject of sales, it is pertinent to consider the accounting principles governing the inclusion of sales in a certain period. In brief, a sale, together with the

cost of the goods sold, should be taken into income during the period in which the seller has fulfilled his agreement for the furnishing of goods or services and has thereby established an enforceable claim for the sale price. As applied to nearly all manufacturing and mercantile businesses this means that sales and shipments or deliveries are synonymous. A collection on account of a sale does not necessarily justify taking the sale into income before delivery of the goods. As an illustration, many orders for the sale of automobiles, where cash deposits are made, are cancelled owing to the inability of the dealer to make delivery, usually through no fault of his own.

When credits to customers for returns and allowances are entered in the sales record or an auxiliary record, which will usually be where credit memoranda therefor are issued, the auditor should inquire into the system as to approval of such credits. If there is no evidence of adequate supervision over such matters it may be desirable to examine the correspondence files with regard to a few selected items, and if the situation appears to indicate opportunity for fraud, to feature the subject in the report.

The auditor should always, at least on a first audit of a concern, make a study of the methods of reporting and recording shipments, in order to be sure that there is no probability of extensive losses of goods. Also, it is usually worth while to inquire into the method of accounting for prepaid transportation charges on shipments.

Freight, express, and parcel post are frequently paid by the shipper with the understanding that they will be charged to the customer, but unless proper provision is made in the accounting system, and the matter is followed up, such charges may easily find their way into the expense accounts. This matter seldom requires more attention from the auditor than a few minutes' investigation of methods unless it appears that the system is loose, when it may be desirable to make a detailed examination of the charges to the particular expense accounts involved.

In the audit of any business where merchandise is shipped to customers in returnable containers (boxes, barrels, cans, reels) it is important that consideration be given to the method of recording the containers shipped, whether or not they ar supposed to be charged to the customers, with a view to

covering any undue occasion for loss in this direction. Some losses will always be experienced.

There are often important matters of business policy involved in the control of containers, but the most effective means of assuring their return in good condition is to charge them to the customer at a price not less than cost. Probably the best way to record containers in circulation which are not charged for is to carry in the customers' accounts inner columns for charges and credits, in number, on account of containers shipped and returned. The effectiveness of this system depends, of course, upon the degree of attention given to the accounts in following up the charges to see that the containers are returned.

Chapter V

THE ORIGINAL RECORDS—Continued

Vouchers.

Definition.—The term "voucher" may be generally defined as some form of written evidence in support of a claim or other statement of fact. In the sense in which it is usually employed, it is evidence of the payment of cash. Under modern accounting usages it is perhaps most commonly understood to refer to the evidence of the reason for which cash is disbursed, apart from the evidence of the actual disbursement. In this work the term will generally be used in this latter purely technical sense, that is, as relating to the justification for disbursements rather than to the disbursements themselves, although there can be no definite separation of the two features.

A voucher, then, may be a bill or bills which are identifiable with a specific payment; it may be a formal receipt, with full particulars as to what the payment covers; or it may be, for practical purposes, a paid check, properly endorsed, which, although not indicating the reason for payment, can be identified as representing payment of known obligations for which there may be no bills or other evidences on file. Examples of the latter are checks drawn in payment of salaries, rent, interest, or other fixed charges of definitely ascertainable amounts, when the endorsement by the payees of checks for the correct amounts constitutes sufficient evidence of the propriety of the disbursements. It would be absurd in most cases for an auditor to insist upon seeing a bill for a certain month's rent, for instance, in support of a properly endorsed check, when he might ascertain that the same amount was paid for the months immediately before and after or that the payment was in accordance with the lease. In such cases consideration must be given to the degree of refinement in the accounting system. In the case cited, if it were usual to have bills for

rent great care should be exercised in approving a disbursement not supported by a bill, because the rent for that month might have been paid twice, either fraudulently or negligently, once on the authority of the bill and once without.

Accounting methods.—In order intelligently to consider the verification of vouchers it is necessary to understand the usual accounting practices with respect to the methods of disbursing cash and the records relating to the disbursements. There are three general divisions of practices in this respect, representing different degrees of refinement.

In the simplest businesses, no record is made of purchases or expenses until the payments are made. All cash disbursed, whether in checks or currency, is entered in the cash book; the particulars of the disbursements may be shown in the cash book or partly on the check stubs. All bills are receipted by the payees and are filed alphabetically or chronologically as they are paid.

The next step in elaboration of the accounting procedure is the recording, in advance of payment, of bills for purchases, and perhaps for expenses, in some such record as a purchase journal, bill register, or voucher register, charging the operating accounts therefrom and crediting individual accounts with the creditors (with or without a controlling account for accounts payable), the cash payments being charged to the creditors' accounts. Under this procedure there are usually some bills for expenses which are not entered until paid, the charges to the expense accounts for such items being made through the cash book. With such a system the bills are likely not to be sent out of the office to be receipted but there will usually be some form of "voucher," "voucher-check," or memorandum made out and sent to the creditor showing the details of remittances. This form may or may not be receipted and returned. A copy of this form, or another form showing substantially the same information, may be kept in the office. The disbursements in currency will generally be made from an imprest fund and the charges to the operating accounts for such disbursements will be made from the cash book. The bills will usually be filed alphabetically or chronologically.

The most up-to-date practice for comparatively large businesses is what is generally designated as a "voucher system." This calls for the preparation of a "voucher" for each pay-

ment to be made on account of purchases or expenses, including reimbursements of petty cash funds. These vouchers are attached to the bills and are entered in a voucher record in advance of payment. The voucher and check forms are often combined so that they may be written at the same time, a copy of the voucher being sent with the check as an advice to the payee of the items for which remittance is made. There are many varieties of methods in this respect but the result of most of them is the same; namely, that the check is definitely identified with the voucher retained in the office. A combination form of voucher and check is usually described as a voucher-check. The vouchers (office copies) are numbered and are filed numerically. Accounts with individual creditors are not kept except as the items are reflected in the voucher record and on index cards or extra copies of the vouchers filed alphabetically. All cash disbursements for purchases and expenses are charged through the cash book to Accounts Payable and the items in the voucher record are then marked paid.

Auditing procedure.—It will be seen that there are a great many varieties of conditions to which the auditor must adapt himself in connection with the examination of vouchers for cash disbursements. It should not be necessary to describe in detail the procedure to be followed under each of the conditions outlined above or their numerous variations. It should suffice to explain the general features of procedure along broad lines of classification, leaving to the auditor the application of such principles to the particular conditions under which he is working.

There is only one condition under which all the evidence in support of a disbursement is furnished by one document; namely, where there is a receipted bill or memorandum covering each disbursement. That condition is seldom encountered when payments are made by check, and even when receipts are obtained, the best evidence of the actual disbursement is the paid check. It is not unusual, however, to find a somewhat similar condition, where full particulars of the items paid are shown on a voucher-check which has passed through the bank and may be compared with the cash book in substantiation of the entries for disbursements. But when the items paid are bills for purchases or expenses, as they usually are, such bills

must be checked either to the voucher-checks or to the voucher record in order to verify the disbursements completely.

As a general rule, when bills are not sent out to be receipted the examination of the bills, or "vouchers," is made independently of the examination of the direct evidences of the disbursement of cash. These latter consist of paid checks, and in some cases of receipts for petty cash payments. Both of these will be considered under separate captions, the present discussion being from this point confined to "vouchers," or the evidences of the reason for payments by check.

The vouchers will be examined and checked to the record of original entry, which may be called a voucher record, purchase journal, or something similar. This record will show the distribution of the charges to the accounts affected. The bills may be entered singly, or several bills from one creditor, perhaps a month's, may be combined in accordance with the manner of settlement. It makes no difference, as to the verification of vouchers, whether or not the bills are posted, either individually or in groups, to accounts with the creditors in an accounts payable ledger.

In the examination of vouchers and of the entries thereof, thought should constantly be given to the objects of such examination. These objects are three, namely: (1) the establishment of the fact of a claim by a creditor against the concern whose accounts are being audited; (2) the determination of the validity of that claim; and (3) the determination of the propriety of the treatment in the accounts of the charge resulting from that claim. The methods of accomplishing these objects may, it is thought, best be discussed in groups corresponding as nearly as possible to the specific matters which the auditor is called upon to consider, as follows: (1) the bills or other basic documents; (2) the assembly of such bills or other documents; (3) general matters relating to the voucher and to its entry in the record. These will be taken up in the order stated.

The bills, etc.—In the examination of bills, invoices, and similar papers, attention should first be given to the name in which they are made out; that is, that they are made out in the name of the concern whose accounts are being audited. This feature is fundamental to the accomplishment of what is stated above as the first object in the examination of vouchers;

namely, the establishment of the fact of a claim by the creditor against this concern and no other.

It must not be assumed that every bill found in the company's files is a proper charge against the company. There have been many cases where bills have negligently been paid by one company when they appeared on their face as charges against another, and there have been more cases where bills made out in the name of an officer of a company or partner in a firm have fraudulently or negligently been paid by the business and charged to its operating accounts. In the latter case it may be proper for the business to pay the bill and charge the account of the person for whom the payment is made. It is conceivable, of course, that a bill made out in the name of an officer or partner is properly chargeable to the operating accounts of the business, but the auditor should never assume such to be the case without inquiry.

Care should be taken not to pass a duplicate bill without investigation as to the original. A bill marked "duplicate," or a carbon copy of a bill, is evidence of the possibility of a duplicate payment, which in most cases can be refuted only by accounting for the original bill. It is obvious that an auditor would not be doing his full duty to his client if he did not exercise due diligence in this respect but accepted the customary approvals as authority for the payment of a claim the validity of which is on the surface questionable.

Unless the bills are accompanied by a statement from the creditor or are marked in some way by the office force as a precaution against their being used twice, some attention should be given to their dates. In perhaps most concerns it is comparatively easy for a clerk to remove a bill from a paid voucher and include it in another for payment a second time unless there is a requirement that bills will be paid on statement only or unless the bills are systematically stamped or otherwise shown as having been paid through a certain voucher or on a certain date. To be sure, the clerk could usually profit by such a practice only through collusion with the creditor, but the auditor should guard against the possibility of any such fraud by looking at the dates of the bills to see that they are current.

Each bill should bear evidence of approval as to the receipt and satisfactoriness of the goods or services, the prices, and

the mathematical accuracy. The methods of indicating these approvals are various, and in many cases not conclusive from the standpoint of the auditor. In some small businesses, conducted largely by the proprietors, there may be no indication of approval of the bills themselves, but the signing of checks in payment thereof may constitute sufficient approval. In other cases the only evidence of approval that the auditor will find is an anonymous check mark; in others, the bills may bear the initials of some person in authority. In all doubtful cases the auditor must be guided in his acceptance of vouchers by what may reasonably be expected in the particular case, at the same time impressing upon his client the importance of keeping the records in condition to be audited properly.

For most business concerns the ideal condition is that each bill upon receipt be imprinted with a rubber stamp which calls for initialing by the proper person as to his approval of the bill with respect to the feature for which his duties make him responsible. A form for such a stamp follows:

Date received ....
By whom received ....
Quality O.K. ....
Quantities O.K. ....
Prices O.K. ....
Extensions and footings O.K. ....
Paid by Voucher No. ....

In some comparatively large concerns, where there is a well organized receiving department, the receipt of the goods may be attested by a receiving report attached to the invoice. On this report, or on the invoice, may also be shown the amount of freight or cartage on the shipment. In this connection, it is usually worth while to inquire into the methods employed in verification of freight bills, with respect to rates and weights and as to whether the charges may properly be deducted from purchase invoices in accordance with the terms of the purchase order. Considerable losses may be sustained by failure to give the proper attention to these matters. Along this line, it is frequently desirable for the auditor to investigate the handling of returned purchases, which is

usually done by the shipping department, to see that they are properly charged back to the suppliers.

The auditor should satisfy himself that the bills are approved specifically as to each feature stated above, or that such general approval as may be indicated is intended to cover all features. If it should develop that the bills have not been verified as to extensions and footings, which is in most cases the only feature that is subject to verification by the auditor, that work should not be done by the auditor, or at least not completely, unless a special arrangement to that effect is made with the client, for the reason that such verifications are not usually included in the scope of professional auditing work and dissatisfaction would be likely to result from the auditor's devoting any considerable time to it unless specifically authorized to do so.

Pay-rolls and salesmen's expense reports, which are in the same category as bills with respect to vouchers, will be discussed under the head of the verification of expense accounts, Chapter XVI.

Assembly of bills, etc.—All essential features of the individual bills having been discussed, consideration will now be given to the assembling of such bills into a group, which is usually done for convenience in recording, especially when accounts with individual creditors are not kept. This assembly is accomplished by some form of secondary record—as contrasted with the primary record of the bills themselves—which is usually known as a "voucher." For convenience in discussion, the term "voucher," which has heretofore been used in a more general sense, will now be applied specifically to the assembly of bills before entry in the voucher record. The form of this assembly may be a copy of a voucher-check or of a memorandum sent to the payee with a separate check, or may be merely an internal memorandum of items, apart from any advice to creditors in connection with remittances.

In the examination of vouchers the first step is the checking of the items shown on the vouchers with the supporting bills, which are usually attached but may be filed separately. This will be done in conjunction with the inspection of the bills, previously discussed. The footings of the items, and deductions for discount and the like, will then be proved.

If the bills are listed on the creditor's statement, only the

total thereof may be shown on the voucher. It may be proper to accept the total shown by a statement without footing the items when it would not be proper to accept without proof the total of items listed on a voucher.

In addition to the approval of each bill, it is usual under a voucher system to require a general approval of each voucher by someone in authority such as the auditor or comptroller, before payment by the treasurer. The voucher should also be approved as to make-up, deduction of discount, and so forth; in other words, it should show that it has been audited by the office staff. The professional auditor should ascertain the requirements of the company's officials in these respects and should determine whether they are being carried out. If the rules are not being followed, or if they are not such as to properly safeguard the business from improper expenditures, the auditor should report accordingly.

Checking the book entries and other general features.—All the work of examining bills and vouchers discussed in the foregoing is done coincidently, and as a part of the checking of the entries thereof in the original record of purchases and expenses, which is usually the voucher record—by whatever name it may be called—but may be the cash book. In checking these entries it is necessary to give attention not only to the total amounts but also to the distribution of the charges, and sometimes credits as well. This distribution may or may not be shown on the bill or voucher, but in any event it is of the utmost importance that the auditor determine from his inspection of the bills what accounts should be charged, and see that the amounts are carried to the record accordingly.

Considerable annoyance, if not serious difficulty, is often caused the auditor by the method of filing vouchers or bills. Unless there is a numerical system of filing, the papers will seldom be filed in the order of their entry in the voucher record. If the auditor desires to examine the vouchers for certain months, as he is likely to do, and the vouchers are not filed in the order of their entry, he should, if possible, have one of the office clerks assort them in the desired order. If that is impracticable it will usually be most expeditious to look through the files for vouchers entered in the months he has selected, by which means the greater portion of the items entered in those months will be examined, and then go through

again, looking specifically for the items not previously checked. It should be borne in mind that the principal purpose in examining vouchers is to verify entries in the original records, and for that reason it is not satisfactory to examine the vouchers that are readily available in lieu of those that may not be.

In examining vouchers by any such method as has been suggested, when the system of filing is a hindrance to continuous progress it is usually desirable to place a conspicuous tick on the vouchers first examined, to obviate the possibility of their being accepted again in support of other entries.

If a voucher cannot be located, the auditor should endeavor to establish the propriety of the disbursement by other evidence. As aforestated, sufficient evidence for auditing purposes may often be found in the paid check. Care must, of course, be exercised in the acceptance of substituted evidence, but the auditor must have regard to the practical aspects of the situation and should not usually be a stickler for strict observance of the customary procedure. There are many cases where criticism can and should be made of carelessness in the office methods without implication of irregularity or of serious impropriety.

If it is the practice of the concern to send bills with remittances, to be receipted, it may be necessary to wait until those paid recently have been returned, or it may be satisfactory to determine that such items correspond with the outstanding checks. Fortunately for auditors, this practice is becoming obsolete, as it is being generally recognized that a paid check constitutes an adequate receipt.

If no satisfactory evidence of the propriety of the disbursement can be adduced—it being assumed that the fact of the disbursement is proved—the auditor must use his judgment as to the course he should pursue, being governed by the relative importance of the item. He may obtain a duplicate bill, may mention the matter in his report, or may, for vouchers apparently mislaid, leave a memorandum in his papers so that they may be examined later if located.

As to each step in the procedure of verifying vouchers and their entry in the records, the principles of testing heretofore stated apply. The extent of internal auditing may, however, especially influence the professional auditor with respect to certain features of the examination of vouchers. If the audi-

tor finds that great care is exercised by the office force in the make-up and approval of vouchers he may with impunity limit his examination of the supporting bills and of the summarization thereof on the vouchers to somewhat cursory tests. The same may apply to distributions of the charges.

Under ordinary conditions, where there is evidence of neither carelessness nor extreme care, it is thought that from twenty to forty per cent of the entries in the voucher record should be verified by examination of the vouchers, and that most of those entries and vouchers should be examined rather thoroughly. It makes little difference whether or not the vouchers selected as tests represent all the entries for certain months, so long as the principle is followed of accounting for certain specific entries in the voucher record and provided there is no deviating from that course because of any difficulties in locating those vouchers. However, it is usually good practice to examine all the vouchers for certain months and select some at random from the entries during other months, so that the tests will touch a considerable part of the period.

The examination of vouchers is not unlike the verification of footings, in that there is danger of the work becoming mechanical. In most cases there is no more important feature of the audit work than the verification of vouchers, and great care must be exercised lest it degenerate into a mechanical process. A person who constantly has his mind on his work may succeed in disclosing duplicate payments, overcharges, or failures to deduct returns, discounts, or other allowances, any of which may be recoverable by the client, not to mention the other matters which may have an important effect upon the accounts.

The footings of the voucher record and the postings to the general ledger should be verified in about the same proportion as the percentage of vouchers selected for examination.

Petty Cash Vouchers.

The term "voucher" as commonly used in relation to disbursements in currency means the evidence of the disbursement itself; that is, the acknowledgment by the recipient of the cash. This meaning, it will be noted, is different from the generally understood significance of the term when used in

connection with disbursements by check, where it relates to the reason for the disbursement rather than to the actual payment of the cash. Petty cash vouchers are often referred to as petty cash receipts or petty cash tickets.

Accounting methods.—As intimated in the foregoing discussion of vouchers, there are several methods of accounting for disbursements in currency. Under the simplest method no distinction is made between disbursements by check or in currency, both being entered in the cash book without any attempt at segregation. The next degree of refinement is the arrangement of separate columns in the cash book for checks and currency disbursements. Then there is the separate petty cash book, where both receipts and disbursements in currency are entered. There are also book records of petty cash disbursements, consisting of the originals or carbon copies of receipts, of uniform size, with the amounts extended into one column and footed.

The best system for most concerns is what is known as the "imprest" or fixed fund system. This system contemplates the depositing of all cash received and the establishment of one or more petty cash funds of stated amount, to be carried separately in the general ledger. No subsequent entry is made in the ledger account unless the fund is increased or reduced. The cash on hand, together with the vouchers on hand for disbursements, must at all times equal the amount of the fund. Periodically—the length of time depending upon the requirements—the petty cash vouchers are treated precisely as are unpaid bills for purchases or expenses, a regular voucher, similar to those made for outside purchases and expenses, being made up for the aggregate amount. The petty cash vouchers are usually attached to this voucher but may be filed separately, in envelopes or otherwise. The reimbursing voucher is entered in the voucher record in the usual way and a check is drawn and cashed to replenish the petty cash fund.

Auditing procedure.—The practices with respect to obtaining petty cash vouchers which are satisfactory to an auditor are about as varied as the methods of recording outlined above. It may be said generally that the recognition of the necessity for strict and detailed accounting for petty cash varies with the size of the business. In some cases the auditor will find little or no evidence in support of book entries; in others

he will find memoranda made by the cashier in lieu of rece which are no more valuable than book entries; and in a fe cases there will be such punctilious observance of accounting principles that there will be a formal receipt for every expenditure, of however small amount. In determining the sufficiency of petty cash vouchers the auditor should give consideration to the internal requirements and, within reasonable limits, be willing to accept as evidences of disbursements in one case what he would not in another.

Petty cash disbursements have been considered thus far as synonymous with disbursements in currency, but there may be in fact an important distinction between them. The correct conception of petty cash is derived from the word "petty," indicating that it is of minor importance. In some business concerns very large amounts of cash are disbursed in currency. In such cases it is necessary to devote a great deal of attention to the disbursements in currency, and, as will be fully explained in the next chapter, more attention than usual to disbursements by check.

In most cases, where the cash on hand can properly be designated as petty cash, disbursements in currency being limited to such items as cannot conveniently be paid by check, it is not worth while to examine more than, say, twenty-five per cent of the vouchers. Such examination as is made, however, should be very thorough. The probability that fraud once committed will be repeated, which is basal to the theory of testing, applies particularly to petty cash disbursements. The amount that may be misappropriated by an employee at one time is not sufficient to cause any serious concern on the part of the employer, nor is it usually sufficient inducement for the employee to hazard detection, so that the auditor needs to consider only the possibility of systematic fraud. This should be disclosed by close scrutiny of the petty cash vouchers for two or three months, which should not be consecutive.

In examining petty cash vouchers the auditor should have in mind the possibility of substitutions as mentioned in connection with the examination of bills, under the head of "Vouchers." Unless the petty cash vouchers are stamped as being paid through a certain main voucher, or with the date thereof, or are otherwise designated to substantially the same effect, the auditor should watch the dates. If the vouchers are

conne̸red, he should make tests to see that the numbers are approximately in sequence. If there is no internal safeguard against duplications he should at least place a conspicuous mark on the vouchers he has examined so that the same vouchers will not be submitted a second time. For this purpose some auditors use a rubber stamp and some perforate the voucher with a conductor's punch, but, in the opinion of the author, these methods require an inordinate amount of time and substantially as good results may be obtained by making a conspicuous tick with a colored pencil.

As there is usually no absolute assurance of the genuineness of signatures to petty cash vouchers, the auditor has to depend largely upon the evidence as to the necessity for the disbursement and, when there is such, upon the approval of the voucher, rather than upon the acknowledgment by the recipient of the cash. Much can often be done by an auditor who is alive to his responsibilities in determining in a general way, independently of any vouchers there may be, the propriety of charges for such items as postage stamps, cartage, telegrams, and messenger service. Some of these may be trivial but a disclosure of fraud in small amounts might save considerable money for the client by apprising him of the untrustworthiness of the cashier. In this connection, it should be possible to check payments of directors' fees, for which there may be no satisfactory voucher, against the record of attendance at the directors' meetings as shown by the minutes.

Care should be taken in checking the detail vouchers to the summary and footing the summary. The distributions of the charges shown by the summary need not usually be verified, in consideration of their relative unimportance.

Chapter VI

THE ORIGINAL RECORDS—Concluded

Cash Receipts and Disbursements.

The records of cash receipts and disbursements may be contained entirely in one book, may comprise a general cash book supported by detail records of receipts from customers and of checks issued, or may be two entirely separate records. The manner of recording does not affect the method of auditing except that where there are auxiliary records it is necessary to check the totals thereof, after verification, to the principal records.

The subjects of receipts and disbursements are separate and distinct, but there are certain features of auditing procedure which apply to both. These will be considered first. The discussion in this chapter is confined to the auditing of receipts and disbursements during a period and does not cover the verification of the resulting cash balance at the end of the period, although the two processes are to some extent interrelated.

The date as of which the cash balance is verified has an important bearing upon the examination of receipts and disbursements. If the balance is verified as of a date subsequent to the end of the period under audit, for reasons which are discussed under the head of the verification of cash on deposit, Chapter VII (page 86 *et seq.*), it is necessary to extend the period for the examination of receipts and disbursements to the later date, giving the same attention to transactions after the end of the audit period as before.

The verification of cash receipts and disbursements is governed by the principles of testing heretofore enunciated. However, the general practice among accountants who audit by tests appears to be the examination of a somewhat greater proportion of entries for cash transactions than of other entries, the reason being that a large proportion of the forms of internal fraud involve the manipulation of the cash records.

In the opinion of the author, under average conditions as to opportunity for fraud, a thorough examination of twenty-five to forty per cent of the entries of receipts and disbursements, combined with thorough tests of the other original records, should be sufficient. It is almost always advisable to verify the entries of receipts and disbursements for the first and last months of the period.

As will be shown later, there is rather more likelihood of cash being misappropriated by never being entered on the books or by manipulation of underlying records such as bills and pay-rolls, than by any means which may be detected merely by examination of the entries of receipts and disbursements, especially if the latter are treated independently of the underlying records, which have been discussed under the head of "Vouchers," Chapter V.

The records of both receipts and disbursements must be footed, in about the same proportion as the specific entries of disbursements are examined. Tests should also be made of the postings to the general ledger.

Receipts.

The verification of cash receipts comprehends in its general significance not only accounting for the cash shown by the cash book as received, but also determination as to whether that record shows all the cash for which those responsible for the receipt of cash should account to the owners of the business. The accomplishment of the latter may be a large undertaking. The extent to which it is possible depends largely upon the nature of the business and somewhat upon the records kept. There is very seldom, however, any excuse for an auditor's ignoring that phase of the auditing and confining his attention to the entries appearing on the cash book, unless, of course, his instructions are definitely to that effect.

An audit of cash receipts and disbursements only is seldom if ever, undertaken except for non-commercial organizations such as religious, charitable, and educational institutions which keep their accounts upon a cash basis. In such case a "cash audit" should be a complete audit, extending, as fa as possible, to the sources from which receipts may be expected It may, in fact, be quite impracticable to obtain any reall

satisfactory evidence in this respect, but every available source of information should be utilized. In any event, the audit of such organizations should be no different from that of commercial businesses with respect to the verification of receipts, of whatever nature. If the auditor is called upon to make a "cash audit" based upon acceptance of the entries of receipts as correct, or if he is unable to determine whether the receipts are correctly stated, he should relieve himself from responsibility by explicit qualification in his report as to the scope of the audit.

The process of determining whether all cash which should have been received has been entered in the cash book is necessarily indirect; that is, it proceeds from the ledger rather than the cash book. For that reason nothing short of a complete audit will suffice. Receipts which may not have been properly accounted for may be classified as affecting one of the following: income (including refunds of expenses), accounts and notes receivable (which may represent income), accounts and notes payable, and capital liabilities. The verification of all these will be discussed in detail in later chapters.

Receipts as recorded.—Having disposed, so far as the cash book is concerned, of the subject of cash received but not recorded, consideration will now be given to the receipts as recorded. It has already been stated that the footings must be proved. This generally applies not only to the "cash" column but also to distribution columns, especially those representing discounts, allowances, interest, and any other charges to nominal accounts.

One of the commonest forms of falsification of the records to conceal the misappropriation of cash is to enter the cash received correctly and then underfoot the cash column and overfoot a column for discounts or other allowances. As an illustration of this practice let it be assumed that a customer pays a bill for $100 less 2% discount. This collection will be properly entered as debits of $98 to cash and $2 to discount and a credit of $100 to accounts receivable. If $10 of this particular cash is abstracted, or the same amount is taken from other cash on hand, the footings, which are posted to the ledger, will be altered so that, in effect, this receipt will be finally entered as a debit of $88 to cash and $12 to discount and a credit of $100 to accounts receivable. The amount of

$10 has to be either charged to some account or not credited to accounts receivable. If the accounts receivable column were underfooted, the correct amount having been credited to the individual customer's account, the accounts receivable would be out of balance $10. If the customer's account were credited with only $90, that would leave a balance of $10 in the account which would have to be disposed of.

It will be seen that the alteration of the totals of the discount and similar columns is a convenient method of concealing abstractions of receipts, and one that is likely to go undetected except by footing the cash book, unless it is indulged in so often that the amount of discounts allowed, or of other charges manipulated, becomes obviously excessive. Of course such manipulation of the totals of distribution columns is, in the illustration given above, accompanied by falsification of the total of the cash column, and it may therefore appear to be unnecessary to prove the footings of the distribution columns, but there are so many variations in methods of concealing fraud that the auditor cannot safely overlook any such comparatively easy method. Even in the case cited, the cash received column may not be underfooted but the cash disbursed column be overfooted, which will accomplish the same purpose; and in a test audit the disbursements for that particular part of the period may not be examined. The principal point in this whole matter is that the auditor should study the possibilities in every case and establish his procedure accordingly.

It is thought that in most cases of complete audits, where the asset and liability accounts are verified as well as the cash transactions, the distribution columns affecting asset and liability accounts need not be footed. It follows that if only a "cash audit" is made all columns should be footed.

Verification of deposits.—If the accounting system contemplates that all cash received is to be deposited in the bank—which practice is always to be recommended as a form of safeguard against fraud—some tests should be made to determine, if possible, whether the specific items entered as cash receipts have been deposited. Further, even though it may not be the practice to deposit currency received, it should be possible to determine whether certain items recorded as receipts have been deposited. It is generally impracticable to determine the

composition of deposits unless copies of the deposit slips are made and retained (which is another desirable practice) but it is always practicable to determine whether or not bank deposits are supported by any entries of receipts.

The reason for thus testing individual deposits, and especially the composition thereof, is to detect any evidence of temporary misappropriations of cash which have been restored, or of the somewhat similar form of fraud known as "kiting," which involves a series of unauthorized "borrowings," one being used to repay the other. A series of possible occurrences will be cited for illustration: (1) $100 is collected from customer *A* and misappropriated, not being entered as a receipt. If it is a check it may or may not be deposited, depending upon the relative ease of cashing the check and of accomplishing the same purpose by depositing it and obtaining the cash by falsifying the record of disbursements, but it will be assumed in this case that the check is not deposited; (2) when it is becoming dangerous longer to withhold credit from *A's* account, a check of $300 received from *B* is entered as $200 from *B* and $100 from *A;* (3) later, a check of $400 is received from *C* and the cashier, needing another $100, enters $200 as received from *C* and $100 from B, deposits the check for $400 and abstracts $100 by manipulation of the disbursements—the precise method not being germane to this discussion.

The reason for the variety of irregularities cited above is to demonstrate the desirability of checking the composition of the deposits. In step *1* nothing will be disclosed; in step *2* examination of the deposit slip would show a check for $300, whereas the cash book would show $200 and $100, which should lead to investigation of the accounts of *A* and *B;* in step *3* the deposit slip would show a check for $400, whereas the cash book would show only $300, in two items, which would be a decided indication of fraud.

When there is more than one bank account, a test should always be made of deposits during the last days of the audit period. The particular purpose of this is to detect a deposit in one bank of an unrecorded check on another bank to conceal a shortage in the first bank, which check cannot reach the second bank in time to be charged by it in the audit period and will not appear as outstanding. Regardless of the number of

bank accounts it is equally important that the deposits for the last two or three days be checked for the purpose of detecting any deposit by an individual to cover up a shortage, or the deposit during the period of cash not taken up on the books as received until the next period.

Disbursements.

The method of verifying cash disbursements depends largely upon the accounting system and practices. The variations in practices have already been discussed to some extent in the preceding chapter in connection with the discussion of the examination of vouchers. As stated there, the verification of vouchers is fundamental to the verification of disbursements, in that the vouchers are evidence of the propriety of the disbursements, the establishment of which is no less important than the determination that the cash was actually paid as recorded. In fact, when the accounts are kept on a cash basis there is usually no separation of the processes of verifying the vouchers and the evidences of disbursements. The subjects are considered separately in this book for the reason that the entry of vouchers is generally independent of the record of disbursements and therefore usually calls for separate treatment in auditing.

Examination of paid checks.—When the disbursements are made by check, the evidences to be examined, in addition to the vouchers as already explained, are the paid checks. By this is meant the checks that have been paid by the bank and returned to the drawer. Such checks are often called "canceled checks" but the word "canceled" is subject to misunderstanding as it is also applied to checks that are voided, or made invalid, usually because they have been spoiled in filling out. Payments in currency have been covered in the preceding chapter under the head of "Petty Cash Vouchers."

In examining paid checks the name of the payee and the amount should be compared with the cash book entry. The endorsements on the check should be examined, with particular reference to the endorsement of the payee—that being, in most cases, the only receipt obtained—and for the general purpose of ascertaining that the check has actually gone through the bank. The auditor cannot be expected to detect

forgeries but he should keep a sharp lookout for suspicious looking endorsements. Banks are sometimes lax in their inspection of endorsements and it is possible for them to accept checks deposited irregularly. For example, a check may be issued by John Doe & Company to Richard Roe and be fraudulently endorsed John Doe & Company and deposited to their credit, the equivalent amount of cash being misappropriated; or the endorsement of Richard Roe may be forged and the check cashed or even deposited to the credit of John Doe & Company.

There have been cases where checks have been fraudulently issued, sometimes to fictitious payees, and have been cashed by an accomplice, where the fraud has been detected through suspicion aroused by the second endorsement. In business generally the recipient of a check deposits it in a bank, and any other procedure, especially if repeated frequently, should arouse the suspicions of the auditor. It is particularly necessary to scrutinize checks to the order of officers and employees and to "cash," with respect to endorsements and to the propriety of the charges to the accounts therefor.

As a rule, insufficient attention is given to checks issued that are outstanding at the end of the period, especially when the audit is made promptly at that time. While an outstanding check that has been recorded as issued is not important as affecting the actual bank balance—assuming that the balance is properly reconciled—it is none the less necessary to inspect it when it has been returned by the bank. If the audit is made a month or more after the end of the period, virtually all checks issued during the period will have been returned by that time and can be inspected. When the audit has been made before that time it is sometimes desirable to make a return visit for the purpose of inspecting checks that have been returned later. The least that should be done is to inspect such checks at the time of the next audit.

The auditor should account, by numbers, for all checks issued during the period, or at least during such parts of the period as he has selected for testing. All numbers should be accounted for as properly entered in the cash book, voided, or outstanding at the end of the period. This procedure may well be combined with the reconcilement of the bank balances at the end of the period, which is discussed in Chapter VII.

It may be thought that if all entries of disbursements are supported by paid checks it is unnecessary to account for the numbers of checks, but it is necessary to do the latter for the reason that a fraudulent check may not have been entered and may have been abstracted from the checks returned by the bank and would therefore not be seen by the auditor at all. To be sure, such an omission to enter a check would, unless an effort at concealment were made, be disclosed by the reconcilement of the bank balance, and if concealed by overfooting the disbursements would be detected by proving the footings, and if it represented an irregular transfer between banks should be disclosed by checking the deposits; but, as stated before, it is impossible to exercise too much caution in such matters. One form of fraud that might not be detected otherwise would be that in which the check was cashed on the last day of the period by an individual or by another bank, so that it could not reach the bank on which it was drawn in time to be charged by it during the period. The work involved in accounting for the numbers is not considerable. It may be done merely by inspection of the cash book if the numbers are entered thereon, or by running through the checks themselves. It should always be done as a separate process, as no person could be sure of doing it properly in connection with the examination of the checks in other respects.

For the same reason that all checks supposed to have been issued should be accounted for, it is necessary, so far as practicable, to determine that none have been issued which were not supposed to have been. Knowing that all current numbers of checks would be accounted for by the auditor, the person desiring to issue a fraudulent check would be likely to use one that was not current. For that reason, the auditor should see that no checks have been abstracted from the back of the check book, if they are in book form. If the check stub shows "void" or "canceled" the mutilated check should be in evidence. It is hardly to be expected that every blank check which may possibly be in the possession of the company will be accounted for unless there is suspicion of fraud, when the utmost precaution in that respect should be taken.

Distribution of charges.—Whether or not the distribution of the charges should be examined in connection with the entry of cash disbursements depends upon the accounting system.

If the accounts are kept on a cash basis the charges to the operating accounts will be made from the cash book, and the examination of the cash disbursements will involve the examination of supporting vouchers and the distribution of the charges. If the accounts are not kept on a cash basis the charges to the operating accounts, or most of them, will come from the voucher record. To the extent that disbursements are represented by vouchers that have already been distributed they will be charged in the cash book to accounts payable, and to the extent to which that is not done it is necessary to test the distribution of charges in the cash book as between accounts payable and other accounts.

Correlation of checks and vouchers.—Under a uniform voucher system, where a voucher is made for every disbursement, the cash disbursement record becomes merely a check register, the total being charged to accounts payable. When the vouchers and the checks are entered in different records it is not entirely satisfactory to examine the entries in the separate records from their respective sources without correlation of the two. Unless the entries are compared in some manner it will not be known that the cash is paid to the individual or company shown by the voucher. Any fraud committed by drawing the check to a payee different from that designated by the supporting voucher might, of course, be detected by the various other auditing processes, or might be disclosed by a demand of the creditor for payment, but, unless conditions as to the office organization are such as to preclude the possibility of such a diversion of funds, it is well to guard against it by a comparison of the checks with the vouchers, either directly or through the entries therefor.

Sometimes the vouchers and checks are filed together, when direct comparisons can be made. Where a voucher is issued for every check, and the distribution of the net amount paid is shown in the voucher record, there is no reason why the cash disbursements record or check register may not be entirely ignored in auditing and the voucher record used in its stead. The only possible difficulty with this procedure would be to determine from the record examined the total cash disbursements for a period, but this amount can readily be computed by adding to the total of the "Accounts Payable" column of the voucher record the unpaid vouchers at the beginning of the

period and deducting those at the end of the period. The latter will be determined in any event.

Unless the net amounts paid are shown in the voucher record it will generally be found desirable to make the principal comparison of the checks with the cash book entries and to make an auxiliary comparison of the payees of the checks with the entries in the voucher record from either the checks themselves or the entries in the cash book. The auditor will do well to study the conditions in each case as to the possibilities of combining such processes, with a view to obtaining the maximum efficiency with a minimum expenditure of time.

The "Proof of Cash".

The methods outlined in the foregoing for the verification of cash receipts and disbursements include no novelties. They are old-fashioned, but are nevertheless sound and practical, and the author has yet to hear of any satisfactory method of accomplishing the same results with less work. There are various fanciful methods involving the construction of cash accounts from independent sources; but any such methods that have come to the attention of the author either do not accomplish their purpose or entail at least as much work as the checking of the entries advocated in the foregoing. None of these methods, therefore, will receive serious consideration here. There is, however, one method that is somewhat widely used, generally under some such description as a "proof of cash," which is predicated upon a fallacy that it is thought should be pointed out.

The "proof of cash" consists of checking the totals of cash receipts and disbursements as shown by the cash book with the totals of deposits and checks, respectively, as shown by the bank statements. In doing this it is necessary to reconcile the disbursements with respect to checks outstanding at the beginning and end of the period, and the receipts with respect to interest, and similar items, which may have been taken up by the bank and on the cash book in different periods. It is also necessary to take into consideration, as affecting both receipts and disbursements, such items as checks cashed for individuals and deposited without entry in the cash book; discounts and exchange deducted by the bank from credits for

deposits and entered on the cash book as disbursements; adjustments of errors by the bank—for example, additions to deposits which are actually deductions from withdrawals; and checks received which have been entered on the cash book but have been endorsed over to others and not deposited. The last-named class of difference, it may be said, is infrequently encountered, and such a practice should always be deprecated on the ground that it may lead to abuses.

It is thought by most accountants who employ this process of reconcilement of the cash book with the bank statements, that if the cash book entries can be reconciled with the credits and charges by the bank, it is thereby proved that all receipts have been properly accounted for, and that it is unnecessary to verify the cash book footings.

It is highly desirable to prove that the receipts for each day have been deposited, that each deposit is represented on the books as cash received, and that each item entered as a disbursement is supported by a check charged by the bank. However, it is not sufficient to check the monthly totals of a cash book in that manner, and manifestly it follows that checking the annual totals (or the aggregate of monthly totals) does not constitute verification of either the items or the totals of the cash book.

In order to effect these proofs it is absolutely essential in all cases to foot both sides of the cash book, or at least to foot the cash receipts and check the disbursement entries, item for item, to the bank statements, which is no saving of labor. A cash collection which has been entered as a receipt might be misappropriated by failure to deposit it in the bank and by underfooting the entries of receipts; then the total receipts as shown by the cash book would agree with the total deposits as shown by the bank statement. A fraudulent disbursement might be concealed by not entering it in the cash book, overfooting the disbursement entries, and abstracting the check when returned by the bank; then the total disbursements as shown by the cash book would equal the total checks as shown by the bank statement. This latter could happen even though the paid checks submitted to the auditor were compared with the record of disbursements, unless they were added or were checked in detail to the bank statements.

As previously stated, the deposits for certain days should be examined. Such tests as have been advocated are at least as conclusive as are comparisons of deposits with entries of receipts for a longer period, and the former usually require much less time to make, as the satisfactory reconcilement of cash book entries with bank statements is often a very laborious process.

Forms of Fraud.

The methods to be employed in the detection of the various forms of fraud have been or will be covered in the discussion of the respective divisions of auditing to which they relate, but it seems appropriate to summarize these forms of fraud at this point in view of their close association with the general subjects of cash receipts and disbursements.

Nearly all fraud, that is, internal fraud, with which an auditor is concerned, is in the form of misappropriation of cash. Thefts of merchandise by those charged with its custody are common, of course; but auditors, professional or private, are seldom called upon to consider them other than to establish systems of accounting and physical control over merchandise which will reduce thefts to a minimum.

However, there are cases where thefts of merchandise may be detected by an auditor. Such a case might be where some person in the sales department or shipping department, acting in collusion with an outsider, had goods shipped to a fictitious consignee. If such shipments were charged in the regular way and the accounts manipulated the fraud would be in virtually the same class as those involving the theft of cash, which may be detected by an auditor. If no record were made, there would be little likelihood of the thefts being discovered by the auditor unless for some reason suspicion were directed at the individual and it were possible to obtain a record of all shipments, or unless the thefts were so extensive as to have an appreciable effect upon the ratio of gross profits as determined by the application of a physical inventory. This latter subject is discussed in Chapter X (page 160).

Misappropriations of cash are of two general classes; namely, failure to account for receipts, and fraudulent disbursements. It is likely that the greater number fall into the first class, and most of these are cases where the cash is not re-

corded as received. It is obviously impossible to cite all the forms of fraud which the ingenuity of man has devised or will devise under special conditions, but the following are forms of misappropriations with attempts at concealment (other than shortages which will be disclosed by verification of the cash balance) which have been encountered often enough so that the auditor may be expected to detect them, or some evidence of them, in a complete audit of the accounts.

1. Failure to account for receipts:

   Sales entered but not included in footings of sales record as charges to Cash or Accounts Receivable and as credits to Sales; if credit sales, may or may not be charged to customers' accounts; if charged, will usually be cleared by credits for cash unsupported by entries for the receipt of the cash.

   Sales entered and charged to customers' accounts, cleared by fraudulent credits for merchandise returned or written off as uncollectible; or charged only to the controlling account for accounts receivable, resulting in a difference between the control and the detail accounts.

   Sales—cash or credit—not recorded in sales record. These are very difficult to detect unless there is a good system of internal control. However, it is sometimes possible to detect the misappropriation of receipts on credit sales by comparison of the deposits with the receipts as recorded.

   Receipts from customers entered in cash book but not included in footings; discounts or some other expense or income account overcharged to offset the credit to accounts receivable.

   "Kiting" receipts from customers, as previously explained. This practice is resorted to as a means of concealing previous misappropriations.

   Receipts for fraudulent or unauthorized issues of notes payable, bonds, stock certificates, and the like, the liabilities for which are not recorded.

   Receipts of miscellaneous income such as unclaimed wages, rentals, commissary and telephone receipts, and sales of scrap, not accounted for.

2. Fraudulent disbursements:

Checks issued and not recorded.

Checks issued and recorded, but in a different name from that of the actual payee.

Checks issued and recorded, but for a smaller amount than that for which actually drawn.

In these three cases the checks will be abstracted when returned by the bank. In the first case, the credit to the cash account may be effected by overfooting the disbursements, with corresponding overcharges to some operating account or to the controlling account for accounts payable, the latter resulting in a difference between the control and the details. In the second case, the disbursement may be entered as, and charged to, some personal account which is inactive or which contains so many transactions that the charge will not be noticed. In the third case, the concealment will usually be by the duplicate use of bills in support of vouchers; that is, bills which have been approved and paid once being used to support later payments. When all payments are made by check this can be practiced profitably only in collusion with the creditor, but when they are not the increased amount can be charged to his account although only part is paid to him.

Irregularities in pay-rolls—overfooting, inclusion of "dead heads," and (usually in collusion with employees) showing excessive amounts earned. Misappropriation of unclaimed wages has been included above, under the head of "Failure to account for receipts."

Irregularities in petty cash vouchers, such as amounts raised, signatures forged, vouchers used a second time.

Cash drawn against fraudulent credits to personal accounts, which will usually be for salary or commission.

Transfers between banks at the end of the period, when the check is deposited in one bank but is not entered

as having been drawn on the other bank and cannot reach the latter in time to be charged during the period. This practice is resorted to in order to conceal previous misappropriations. The same may be done with a check issued for cash if it is possible not to have it reach the bank on which it is drawn during the period; that is, if the check is cashed by an individual or by another bank on the last day of the period. The same result may also be accomplished by depositing cash received during the period which is not recorded until later.

Redemptions of tickets, coupons, and the like, which have been stolen by an insider.

Collusion with suppliers, usually in raising the amounts of bills after approval or approving excessive charges. Such frauds can very seldom be detected by the professional auditor.

The Prevention of Fraud.

Having covered in some detail the various forms of fraud, attention will now be given to the steps that should be taken to prevent fraud, or at least to make it extremely difficult, and to facilitate its disclosure if committed in spite of the precautions. Some of these have already been indicated or suggested but it will do no harm to consider them again in this connection.

Some precautionary measures are valuable chiefly for their moral effect, but the importance of that aspect should not be underestimated. It has previously been stated that a considerable part of the value of an audit lies in the effect upon the office staff as a deterrent to fraud. This principle applies with at least equal force to internal precautionary measures.

Aside from the protection of his own interests, every business executive has a positive duty to his subordinates which may best be expressed in the words of the Biblical supplication "Lead us not into temptation." Every honest man should be encouraged to stay honest.

All officers and employees who are connected in any way with the handling of cash, and in some cases merchandise, should be bonded. The reasons for this are two: moral effect and the possibility of recovery in the event of fraud being

committed and disclosed. Many executives seem to entertain an unwarranted feeling of security based upon the bonding of employees, overlooking the fact that the bonds are worthless, except for moral effect, unless the accounts are audited. There should be no valid objection to the bonding of any officer or employee, but frequently sentiment is allowed to interfere with the bonding of certain "trusted" individuals. As a matter of fact, nearly all frauds are committed by "trusted" officers or employees; their opportunities for fraud arise through their being trusted.

All officers and employees who are concerned with the handling of cash and securities and with keeping the accounts should be required to take vacations and should, whenever at all practicable, be assigned to different duties occasionally.

Whenever the size of the business warrants it, the actual handling of cash and securities and the signing of checks should be done by a different person from the one who keeps the books. In large offices it is well to have the mail opened by still another person or in another department, the receipts being listed in triplicate—one copy, with the checks, being turned over to the cashier, another to the bookkeeper, and the third retained for internal auditing purposes.

A study of the forms of fraud cited earlier in this chapter makes it very evident that many forms are rendered extremely difficult, if not impossible, by the depositing of all cash received and the limiting of disbursements in currency to minor expenditures. This involves the establishment of imprest working funds, which have been explained in the preceding chapter (page 63). The amount of such a fund should be limited to the reasonable requirements for a period not to exceed a month, so that the cashier will not have undue opportunity for misappropriation. Receipts should always be deposited promptly so that there can be no excuse for disagreement of the deposits with the receipts. There is, of course, another reason for this, not connected with the subject of fraud; namely, that a drawer of a check cannot be held liable for the amount of the check in the event of the insolvency of the bank unless the check is presented promptly.

It is desirable that the deposit slips be prepared in duplicate. The duplicates cannot be relied upon if the cashier is suspected of irregularities in connection with deposits, but otherwise

they may be accepted as prima facie evidence of the composition of deposits.

In retail businesses there should be a carefully planned system of control over cash sales. It is impracticable to discuss this matter at great length in general terms, but it may be stated that unless cash registers or similar devices are used *the sales slips should be numbered and all numbers accounted for.*

It is often desirable to have checks countersigned. It is possible, however, for the auditor to attach too much importance to countersignatures as they are often merely perfunctory. Many cases of fraud have been disclosed where one party has signed blank checks in advance, in flagrant disregard of his responsibility.

It is usually desirable, and often practicable, for someone other than the cashier to reconcile the bank balances. Further, this should be done as soon as possible after receipt of the bank statements, so that no time will be lost in discovering any irregularities.

Sales invoices, cash sales slips, and debit memoranda should be numbered by the printer, and all the numbers should be accounted for by someone who can be held responsible.

Someone in authority should always approve credits to customers for returned goods and allowances; also entries writing off accounts as uncollectible.

Purchase invoices should always be approved by some responsible person or persons as to the receipt of the goods, prices, and so forth. Invoices should be checked with the purchase orders and should be stamped with the date of payment or with the number of the voucher to which they pertain, so that they cannot readily be used a second time.

Traveling and similar expenses should be paid, or reimbursed for, only upon proper vouchers, which should follow the same course as vouchers for other expenses.

As to petty cash funds, the responsibility should be placed definitely upon one or more individuals, others being denied access. Petty cash vouchers should be written in ink and the amounts should be written out. Especially if the amount of cash handled is considerable, the vouchers should be numbered and the numbers accounted for. All vouchers should

be approved by someone in authority. They should be stamped with the date or number of the reimbursing voucher.

All vouchers, sales invoices, debit and credit memoranda, *and similar documents and records, should be checked by someone other than the person who makes them up. Sales invoices should be checked with the sales orders.*

Access to securities, if the amounts are considerable, should be had by two or more officers jointly.

It should be required that all subsidiary ledgers be kept in balance. It is desirable that someone other than the regular bookkeeper take off the trial balances, at least occasionally.

As to merchandise, there should be as good a system of physical control as possible, a perpetual book inventory if practicable, and adequate records in the purchasing, receiving, sales, and shipping departments.

The accounts of branches should be controlled by the main office in as much detail as is practicable.

The Auditor's Attitude in Fraud Cases.

It seems appropriate at this point to caution the auditor against making any accusations of fraud which cannot definitely be proved. There has been a great deal of harm done by auditors jumping to conclusions upon the first indication of fraud. Every clue to fraud should be assiduously followed up and nothing should be assumed in relation to it; but not even a suggestion of irregularity should be made until there is clear evidence to that effect, and even then the individual should be approached tactfully, and an opportunity given him to advance any possible explanation. If it is definitely determined that fraud has been committed the auditor should be extremely cautious lest he subject himself to the charge of slander or libel by making a positive accusation of a particular person. The auditor should not make any assertions in his report regarding fraud that he would not make in court under oath.

CHAPTER VII

ASSET ACCOUNTS

The discussion will now turn to the auditing of accounts from the trial balance, as distinguished from auditing from the original records, which has been covered in the three preceding chapters.

Auditing from the trial balance is intended to mean the verification of the balance in each account appearing on the trial balance of the general or private ledger at the given date. In complete audits this will include the balances of operating accounts before closing for the period ended on that date, and will therefore comprehend all entries in the accounts during the period. As stated in Chapter IV (page 37), the auditing backwards from the trial balance should be supplemented by auditing forwards from the original records.

The procedure to be outlined under the heads of Asset Accounts and Liability Accounts applies to both complete audits and balance sheet audits.

The sequence in which the asset and liability accounts are discussed is generally that in which it is appropriate for most businesses to list the items in a balance sheet; namely, the arrangement of assets as nearly as practicable in the order of their availability, and liabilities in the order in which they are payable, with the accounts representing net worth appearing last. For an extended discussion of this subject the reader is referred to the author's book "Accountants' Reports."

Reserves against asset values will be treated under the heads of the respective asset accounts to which they relate, and there will be some other combinations, such as various classes of securities, for convenience in discussion.

Before taking up the discussion of the several classes of assets and liabilities it is desirable to touch upon one subject which affects many of them; namely, the proper statement of accounts carried in foreign currency. It is generally agreed that current assets—cash, accounts receivable, and merchan-

dise—and current liabilities, carried in foreign currency, should be converted into dollars at the rate of exchange prevailing on the date of the balance sheet. There may be some exceptions, such as where the proceeds of realization of the assets are not to be remitted to the home office by the foreign branch, but these may be ignored for the present purpose. Investments in plant assets, and in most cases in securities, may properly be carried at their cost in dollars when acquired, being subject to the same principles as govern the accounts carried in dollars, unless it is contemplated that they be disposed of, when they should be appraised as nearly as possible at their value in the foreign currency and converted at the prevailing rate of exchange.

Cash on Deposit.

Date of verification.—A fundamental feature of the verification of cash on deposit, or cash in banks, as it is often called, is the date as of which verification should be made. This depends upon the conditions with regard to the cash on hand, negotiable instruments, and securities, and the time when the audit is taken up.

If the amount of cash on hand at the date of the balance sheet or at the time of verification is considerable, and especially if the receipts and disbursements cannot readily be separated as between checks and currency, it is necessary to verify the bank balances as of the date on which the cash on hand is counted. The reason for this is that if the bank balances and the cash on hand are verified at different dates, opportunity is given to conceal a shortage in one by drawing on the other.

If the bank balances were verified as of the date of the balance sheet, and the cash on hand counted later, a shortage in the latter could be covered up by the obtaining of currency from the bank in the interim so that the cash on hand would be intact at the time of count. Similarly, if the balances were verified at different times, a shortage in the bank account might be made good temporarily by depositing currency which had either been counted before or would later be drawn from the bank and counted. In any such cases the simultaneous verification of cash on hand and bank balances, that is, at the close

of business on the same day, will disclose a shortage in the aggregate cash balance.

The opportunity for making, or at least effectively concealing, substitutions of cash as between bank balances and cash on hand is to a large extent dependent upon the two classes of cash balances being so intermingled that their separation is not readily practicable. Such is not usually the case when the cash on hand is carried in an imprest fund—all receipts being deposited and the fund being reimbursed by check for specific disbursements—or when a clear record is kept of currency received and disbursed, which may be in the form of separate columns in the cash book or of a separate petty cash record. Under such conditions it is proper to verify the cash on hand at a date later than that on which the bank balances are verified, provided the audit as to the receipts and disbursements in currency is carried up to the time of the count of the cash on hand.

In the case of an imprest fund of comparatively small amount, such supplemental audit need comprehend only the examination of the ledger or the cash book to determine whether the fund has been increased or decreased during the intervening period. But when the amount of cash on hand is large in comparison with the bank balance, and especially if the amount fluctuates, all entries of checks, and in some cases the checks themselves, should be examined, and unless the currency is carried in an imprest fund, the entries of receipts in currency should be footed. This is subject to the qualification that such entries subsequent to the date of the balance sheet need not be examined more closely than are those prior to that date—which would usually preclude any detailed examination in the case of a balance sheet audit.

After what has been said about the possibility of manipulation of balances so that the same cash is included as on deposit at one date and on hand at another, it will be obvious that there would be even greater risk in not verifying all bank balances simultaneously. It is comparatively easy to juggle bank balances at a certain date by drawing a check on one bank and depositing it in another at such a time that it will be credited by the payee but not charged by the drawee within the period, no record of the check being made. Of course, such manipulation should be disclosed by the procedure outlined in

Chapter VI, but, as previously stated, recourse should be had to every available means of discovering irregularities.

In addition to the cash on hand, it may be necessary to consider negotiable instruments, such as notes and acceptances receivable and warehouse certificates, and marketable securities, in deciding upon the date as of which the bank balance should be verified. The reason for this does not concern the verification of the cash balance so much as it does that of those other assets, and the reason why they are particularly affected is that they can be temporarily disposed of in order to realize cash.

As an illustration of the application of the theory involved, let it be assumed that the balance sheet date is December 31st, but that it is known in the client's office that the audit will not be taken up until February 1st. It may be possible to obtain cash on or before December 31st to make good a shortage on that date by selling or pledging certain negotiable instruments or securities, and to regain possession of them by February 1st by repurchase or by paying off the loan so that they will be on hand for inspection at that time; or it may be that they are not on hand for inspection but have matured or have been permanently disposed of by February 1st and the cash proceeds entered as received in the month of January. If the documents are on hand for inspection, there may be endorsements which may indicate the temporary misappropriation, but it is possible that such endorsements might not appear, as in the case of coupon bonds and possibly also negotiable instruments made to the order of another and endorsed in blank. Under the second hypothesis, when the documents were not on hand, there would, of course, be no opportunity to inspect them for any evidences of irregularity.

It will be seen that the auditor should investigate the opportunity for fraud in connection with negotiable instruments and marketable securities before deciding the question as to whether he may safely verify them at a date different from that as of which the cash balance is verified. His investigation, of course, may show that, even if there are considerable amounts of notes or securities that could be utilized in covering up a previous shortage, it would be practically impossible to do so, or at least without detection; but if there is the slightest doubt in the auditor's mind he should verify all assets that may

readily be converted into cash at the same time as the cash is verified.

It is usually desirable, if practicable, to verify the bank balances at the end of a month, when the statements are regularly rendered or pass books written up by the banks. To have this done at an odd date causes delay to the auditor, and inconvenience, if not annoyance, to the banks and to the clerical force of the client.

If the audit is made considerably after the date of the balance sheet it is almost always desirable to verify the bank balances as of a current date, aside from the question of synchronizing the verification of all cash balances. The reason for this is that it is usually difficult, and in some cases impossible, in reconciling the balance as stated by the bank with that shown by the books, to distinguish the paid checks returned by the bank up to the date of the balance sheet from those returned subsequently. Many banks perforate checks in a cypher which is designed to be illegible to depositors, and others cannot be depended upon to indicate the date of payment.

In reconciling the bank balance as of a past date there is usually no danger of including as outstanding any checks that actually had been paid by the bank, as the effect would be to decrease the balance shown by the books, or to increase that stated by the bank—either of which would be an indication of error. But there is danger, unless the date of payment by the bank is clearly shown on the check, of failing to include as outstanding some checks that had been credited to the bank on the books but not charged by the bank at the date of reconcilement, thus possibly failing to reveal a shortage by showing a balance in agreement with the books but in excess of the true amount. This can be illustrated very simply by assuming that the books and the bank statement each show a balance of $1,000, whereas there was a check for $100 outstanding, so that there was actually only $900 on deposit. After subsequent checks had been returned by the bank it might not be discovered that the $100 check was outstanding at the date as of which reconcilement is made.

When it is deemed necessary, for any reason, to verify the bank balances at a date later than that of the balance sheet, the same principle applies as has been mentioned in connection

with imprest funds; namely, that it is necessary to extend the period for which the receipts and disbursements are to be audited to the date as of which the balances are verified. In a complete audit, the transactions subsequent to the date of the balance sheet should receive the same attention as those occurring during the audit period ended on that date. In a balance sheet audit, it is necessarry to examine the records of receipts and disbursements sufficiently to determine whether there was a shortage in the bank account at the date of the balance sheet which has since been restored.

When the bank balances are verified at a date subsequent to that of the balance sheet the audit working papers should include a reconcilement of the balances at the two dates, based upon the entries for the intervening period, commented upon above. This reconcilement will be effected by adding to the balances as verified the total disbursements for the intervening period and deducting the total receipts for that period, thus arriving at the balances at the date of the balance sheet.

Processes of verification.—The verification of a bank balance, *per se,* involves two processes; namely, the obtaining of authoritative evidence of the balance on deposit as stated by the bank and the reconcilement of that amount with the balance shown by the books. These processes will be discussed in the order named.

What are generally regarded as bank accounts, or deposit accounts, include current checking accounts, balances represented by certificates of deposit, and deposits for special purposes, such as for payment of interest and dividends. They may also include other special deposits of a more permanent character or those which are less directly under the control of the depositor, such as sinking funds and deposits with trustees in lieu of property sold, but such deposits would not properly be classified as current funds and will not be considered here. Of the classes of bank deposits which are regarded as current, all present substantially the same problems as to verification except certificates of deposit. These will therefore be considered first.

Certificates of deposit.—As a certificate of deposit is negotiable, and therefore can be sold or hypothecated, the only satisfactory verification is inspection of the certificate itself, unless it is pledged or otherwise held by another, in which

case a certification to that effect should be obtained from the custodian. It is not satisfactory merely to obtain an independent acknowledgment by the bank that the certificate of deposit has been issued and is outstanding. However, if the certificate has been redeemed between the date of the balance sheet and the time of the audit, such an acknowledgment should be obtained and the proceeds should be traced into the current checking account.

As a general rule, demand certificates of deposit may be included with current cash on the balance sheet without comment, but time certificates are usually shown separately. If the certificate is pledged, or is deposited in escrow or otherwise so that the amount will not be available for the discharge of current liabilities, the facts should be stated on the balance sheet.

Current checking accounts.—The evidence of a current checking account is to be found in a bank statement or a balanced pass book. As to commercial bank accounts at least it is becoming quite general for banks to render monthly statements. Since the introduction of bookkeeping machines many banks have adopted the practice of writing up statements continuously during the month, simultaneously with making the entries in the ledger accounts, using each as a check on the other. When a bank renders statements the pass book is used only to enter the deposits, but when it does not the pass book is written up and balanced when presented for that purpose. From the standpoint of the auditor the statement system is infinitely superior to the pass-book system.

Independent certificates.—It may be said to be a traditional policy of most professional auditors not to accept a pass book or statement as authoritative evidence of a bank balance unless it is obtained from the bank by the auditor himself, which is comparatively seldom practicable, but to obtain an independent certificate directly from the bank. The reason for this is that the pass book or statement submitted by the cashier may be wholly spurious or may have been altered to show an excessive balance. Under modern conditions this danger may be said to be almost entirely theoretical, especially with the more general use of statements by banks. During the very wide experience of the author's firm, covering a period of nearly thirty years, only two cases are remembered where

a pass book was thus falsified, and none involving a bank statement. It is not known, of course, to what extent the knowledge of the practice of obtaining independent certificates has acted as a deterrent influence when pass books or statements might have been falsified in an effort to conceal fraud.

It may be argued that an auditor is justified, under ordinary conditions, in accepting a statement or pass book, after close scrutiny, as sufficient evidence of a bank balance, upon the theory that in doing so no greater risk is taken than in accepting without confirmation other documentary evidences such as purchase invoices, paid checks, and negotiable instruments—as to which confirmation is impracticable or is generally conceded to be unnecessary. Certainly it is no more essential for an auditor to have in his working papers the evidence of a cash balance than it is to have evidences of innumerable other items which have been verified without recourse to certifications of third parties. However, it seems that the safest practice is to obtain independent certificates, as a comparatively simple precaution against falsification of statements or pass books.

It is customary, and desirable, to combine the bank certificate as to the cash balance with one covering indebtedness to the bank. The natural source of loans is a depositary bank, and it is essential that the auditor make inquiry of every known source to determine the obligations of that character. Excepting as to some strictly cash audits where the auditor is not interested in whatever liabilities there may be (which cases are very rare), or where the concern obviously has no bank credit, it is necessary that a certificate be requested from each depositary bank in regard to the indebtedness of the concern, whether or not any is shown on the books, including any banks with which funds have been deposited within, say, a year but where there is no present balance.

On the opposite page is shown a form which has been proved to answer all reasonable requirements of a blank certificate covering the features of cash balance and indebtedness.

The form exhibited is so designed that the certificate as to the cash balance may be requested as of a different date from that as to the liabilities. If, for example, an audit as of December 31st is not made until February it will probably

BLANK & BLANK
Certified Public Accountants
110 Broadway
New York

(Date)....................

....

....

Dear Sirs:

Please complete the attached certificate with respect to

....

and mail to us, in the accompanying stamped and addressed envelope, for which we extend our thanks in anticipation of your prompt attention.

Yours very truly,

APPROVED:..................

....

Messrs. Blank & Blank,
Certified Public Accountants,
110 Broadway, New York.

Dear Sirs:

At the close of business on..........the balance on our books to the credit of...
was...............................Dollars ($..........)

At the close of business on...........said................
was obligated or indebted to us as maker, endorser, or guarantor on loans, notes, participations, or other accounts or contracts as follows:

DESCRIPTION OF OBLIGATION	PRINCIPAL	INT. RATE	DESCRIPTION OF COLLATERAL OR SECURITY

Dated at. ..... By.....
.192... (Title)..

be considered more satisfactory to verify the bank balances as of January 31st than December 31st, in accordance with the foregoing remarks on the subject of the difficulty of properly effecting a reconcilement of the bank balance when paid checks have been returned by the bank later than the date of the balance sheet. In this connection, the auditor will do well to defer sending out bank certificates until he has determined by investigation the most expeditious and satisfactory procedure to be followed in the verification of the cash balances. In addition to the question concerning the date as of which the balances are to be verified, it may be found that receipts on the last day of the period have not been deposited until the next day, when it will probably be considered desirable to add to the certificate a request that the amount of the deposit on that day be stated. There may be other conditions which will similarly affect the contents of the bank certificate.

Many banks have adopted the policy of never issuing a certificate as to the account of a depositor or borrower without retaining a copy in their files. To facilitate the making of such copies some firms of accountants formerly used copying ink or pencil on their forms to permit of making press copies and now that copy presses are no longer in general use furnish the banks with second sheets filled out in carbon, but banks rarely avail themselves of such offers of assistance; those requiring copies almost invariably write letters on their own stationery instead of completing and returning the forms.

Reconcilement.—The matter of reconciling the balances as shown by the books and by the bank statement has already been touched upon. It is usual to reconcile to the balance as shown by the statement or pass book even though that amount may later be confirmed by independent certification. There are two general methods of reconcilement, which are exemplified as follows:

1. Balance per bank statement.
   Add:
      Receipts on December 31st deposited on January 2nd.
      Exchange charged by bank in December entered on books in January.
                  Total.

Deduct:
Outstanding checks (itemized).
Interest credited by bank in December entered on books in January.
Total.
Balance per books.

2. Balance per books.
Add:
Outstanding checks (itemized).
Interest credited by bank in December entered on books in January.
Total.
Deduct:
Receipts on December 31st deposited on January 2nd.
Exchange charged by bank in December entered on books in January.
Total.
Balance per bank statement.

As the auditor's work is directed toward verification of the balances shown by the books, the first method seems more logical than the second. It also lends itself more readily to the application of additions and adjustments. For example, a reconcilement as of a date subsequent to that of the balance sheet might be continued thus:

Balance per books, January 31, 1924.
Add disbursements, January.
Total.
Deduct receipts, January.
Balance per books, December 31, 1923.

If there is more than one bank account each may be reconciled separately or the reconcilements may be combined on one sheet, either by listing the names of the banks down the side of the sheet with columns for the classes of reconciling items or by reversing the arrangement, depending upon the number of banks involved. In such combinations the outstanding checks are usually listed on auxiliary sheets.

It will be noted that one of the items in the foregoing recon-

cilement is "Receipts on December 31st deposited on January 2nd." It is not sufficient that such a difference merely be accounted for in a reconcilement, but it must be determined that the deposit was actually made later. If the auditor is on hand at the date as of which the cash balance is being verified, the undeposited receipts should be inspected, the verification being governed by the usual procedure as to cash on hand. Then he should see that they are deposited, and an entry in the bank pass book or a receipted deposit slip will usually suffice for that purpose.

If the undeposited receipts have not been inspected, the auditor may accept an entry in the pass book, or in a statement if one has been rendered, or a receipted deposit slip, or he may ask the bank to include that feature in its certificate, as previously stated, depending upon the relative amount of the receipts and any other pertinent conditions. This procedure applies also to cash recorded as in transit at the date of the balance sheet.

The method of ascertaining the outstanding checks depends largely upon the extent to which the paid checks are examined and checked to the disbursement record, as discussed in Chapter VI. In a complete audit, it is advisable to combine the examination of paid checks with the preparation of the list of outstanding checks. In any audit, the paid checks should be examined for the last month of the period, as most of the outstanding checks will have been issued during that month.

Unless the auditor has reconciled the bank balance at the beginning of the period and examined all the paid checks returned by the bank during the period, he will have to accept the client's reconcilement at some date during the period as a basis for his reconcilement; that is, for old outstanding checks. If all the paid checks have been examined for, say, the last three months, and the list of outstanding checks has been prepared at the time, it is likely that no outstanding checks that have been recorded as issued will be omitted from the reconcilement. The omission of outstanding checks, owing to the fact that they have not been recorded, can be detected only by examination of the deposits for the purpose of discovering any irregular transfers on the last day of the period or by accounting for all the checks by numbers, as discussed in Chapter VI (pages 71 and 73).

It should be remembered that, as previously stated, there is more danger of failing to include checks as outstanding than to include some erroneously. Therefore, if the auditor has accounted for all the checks issued during a reasonable period as on hand or as outstanding, he takes no risk in considering as outstanding any that may be shown by the client's reconcilement at the beginning of that period which have not been returned. The only risk lies in the assumption that the client's reconcilement shows *all* the checks which were outstanding at that time. This risk may be regarded as negligible unless the audit has disclosed evidences of irregularities in other respects.

Certified checks which have not been returned by the bank must not be included as outstanding, as they are charged by the bank at the time of certification. They are evidenced by charge slips included with the paid checks.

The question often arises as to the disposition to be made of old outstanding checks. It is manifestly undesirable to carry them as outstanding indefinitely. The auditor may properly recommend that, in the absence of unusual circumstances, checks outstanding over a year be written back into the cash account and credited to a liability or reserve account; and that checks over, say, three years old—or less than that, if the amounts are small—be transferred to the credit of profit and loss.

It is essential to the proper reconcilement of a bank balance to determine that the credits by the bank immediately preceding the date of verification correspond to the charges to the bank by the depositor. For this purpose the same procedure should be adopted as has been outlined in the preceding chapter under the head of "Verification of Deposits" (page 70). When there is more than one depositary bank, the number of days for which the deposits should be checked ought to be at least as many as it would take a check which is drawn on the most remotely located bank and deposited in another, to reach the drawee bank. To illustrate: a check drawn on a Chicago bank may be deposited in a New York bank on December 30th and not be charged by the Chicago bank until after December 31st, so that if there were bank accounts in both those places it would be necessary to check the deposits in each bank for at least three days, in order to detect an unre-

corded transfer of funds which would increase the aggregate balance on deposit as shown by the banks owing to no deduction having been made for the outstanding check. Regardless of the number of banks, it is necessary to determine that the deposits have been taken up on the books as receipts during the period. It is also desirable if practicable to examine the charges by the banks subsequent to the date of verification for the purpose of determining whether any items deposited prior thereto have been returned as valueless.

Bank overdrafts.—The question of bank overdrafts merits consideration at this point. Overdrafts are liabilities, and in practice they are usually treated as liabilities to the banks, but in most cases where they are so treated they are peculiar liabilities in that the indebtedness is unknown to the creditors. The reason for this is that the overdrafts are usually represented by checks drawn which are known not to have reached the banks and been charged by them; in other words, by outstanding checks. There is, of course, no doubt about an overdraft being a liability to the bank if the bank, by honoring checks in excess of the deposit, creates a debit balance on its books. While the drawer of a check may stop payment before its presentation to the bank, it is common practice to consider that when a check is sent out the cash passes from the control of the drawer, and the liability to the payee is discharged. With a going concern, this principle should usually apply even though there is insufficient cash on deposit to meet the checks; in that event the excess of the checks drawn over the bank balance becomes a liability to the bank.

It frequently happens, through carelessness or inadvertence, that book overdrafts are created by drawing and entering checks which are held in the office. If the auditor can satisfy himself reasonably that certain checks had not been sent out of the office on the date of verification of the bank balance he may with propriety add back the amounts of such checks tc the cash balance and to the accounts payable. He may be able actually to inspect the checks on hand or he may accept the statement that such a condition existed if it is supportec by an unbroken sequence of checks shown by the reconcilemen as outstanding, adjusting the accounts for the total thereof.

When there is more than one bank account and there is a available balance in one bank which more than offsets a bool

overdraft (represented by outstanding checks) on another bank, it is thought to be proper to deduct the overdraft from the available balance and show the remainder in the balance sheet as cash. The reason for this is that there has been no impairment of the cash balance as a whole, it merely requiring a transfer from one bank to make up the deficiency in the other. If an overdraft on one bank exceeds the balances in the other banks, the former should be shown as a liability and the latter as an asset. It is possible, of course, for a small available balance in one bank to be transferred for the purpose of merely reducing an overdraft on another bank, but it seems that no good purpose would be served by doing so, especially for a going concern. Unless it is a going concern the cash assets and overdrafts should always be stated separately.

Date of closing cash book.—The cash book should be closed promptly at the end of an accounting period. Otherwise the amount of cash shown in the balance sheet, as well as the other accounts affected, will be incorrect. Many institutions and associations whose accounts are kept upon a cash basis hold their cash books open after the end of the period in order to include receipts of income and disbursements of expenses in the accounts for the period, and the auditor cannot very well reverse the resulting entries. However, he should call attention to the facts in a footnote to the balance sheet or statement of receipts and disbursements in his report. In other cases, where cash books are kept open for the purpose of increasing the cash balance or decreasing the liabilities, the auditor should do everything in his power to discourage the practice, sometimes to the extent of reversing the entries for the purpose of his report. In most cases every legitimate purpose of holding the cash book open can be served by accruing income and expenses through the journal at the end of the accounting period.

When the cash book is kept open care must be exercised in verifying the cash book balance. Usually it is not sufficient to verify the bank balance at the balance sheet date and merely reconcile that amount with the book balance by adding the receipts and deducting the disbursements, unless the ante-dated transactions are few and satisfactory proof can be had as to the deposit of the receipts. It is usually desirable to have the bank account balanced as of the last date on which receipts or

disbursements for the period were made, or as of a date subsequent thereto, rather than prior.

Special bank accounts.—The verification of bank balances should embrace any special bank accounts, such as pay-roll, interest, and dividend accounts, even though there is no balance in the account on the books. Such an account is usually charged with cash transferred from a regular bank account to a special bank account from which certain predetermined disbursements are to be made, and is immediately cleared by drawing checks aggregating the amount of the deposit. Some companies, notably railroad and public utility companies, continue to carry bond interest and dividends in liability accounts until they receive bank statements with supporting vouchers, in the form of checks or coupons, when the liability accounts are charged and the special bank accounts credited. This might also be done in the case of special bank accounts for pay-roll disbursements, but the practice is unusual.

Whatever balance the bank reports as being in a special account of this nature will be represented by outstanding checks or bond coupons; but it is just as necessary to reconcile the balance in such an account and verify the charges thereto by the bank as it would be if the disbursements were made through the regular bank account. The reconcilement with respect to outstanding coupons is made by comparing the numbers and denominations of those returned with the record of bonds issued.

Cash on Hand.

Date of verification.—A fundamental and very important phase of the subject of the verification of cash on hand is the time when it should be verified. This has already been discussed in its relation to the verification of cash on deposit and other assets which are readily convertible into cash, and it has been shown that in some cases the verification of all such assets should be made simultaneously, at the date when the cash on hand is counted. Consideration will now be given to the time when that should be done.

From the standpoint of the conclusive determination of the possession of the cash at the time, the verification should be made at the close of business on the date of the balance sheet or on the last day of the period for which the audit is being

made. Of course it is immaterial whether it is done late on one day or early on the next day, so long as effect has been given to all the transactions for one day, and none for the next, when the verification is made. By transactions for the day is meant those applying to the business day; all cash received to be deposited on that day, and all checks issued that day, should have been recorded, and all receipts and disbursements in currency for the day should have been made and recorded. If the cash on hand is counted at that time, whether or not it is carried separately from the cash on deposit, there never will be any question as to the substitution of one for the other.

This arrangement is ideal except that if it is carried out regularly and exclusively no advantage is taken of the greater likelihood of disclosure of a shortage by surprise examinations. This leads to consideration of the difference between verification of the cash assets *per se* and determination of the honesty of those entrusted with their control. It is a rare occurrence for a count of the cash in connection with a periodical audit to disclose a shortage of any consequence. This is easily understood, as the cashier usually knows when to expect that his cash will be counted and if a shortage exists he will if possible restore the amount misappropriated so that the fund will be intact at the time of count, even if the restitution is only temporary. The only surely effective means of discovering a shortage is to examine the cash balances at odd times without advance notice to anyone in the organization, usually not excepting the executive who engages the auditor for the purpose. The psychological effect upon those concerned of informing them in advance that such an arrangement with an auditor was being made would almost obviate the necessity of carrying out the plan.

What has been said would seem to dispose of the fallacious notion of many auditors that the first thing to do in any audit is to count the cash. In fact, the effect of surprise may best be obtained by the auditor's waiting a few days, assuming that the audit will require that long, and then at the end of some day quietly announcing to the cashier that he is ready to count his cash.

The auditor should not undertake to count the cash until he has ascertained just what cash there is to be verified. It

frequently happens that after the cash on hand has supposedly been counted it develops from the accounts that there were other funds which should have been accounted for. When counting the ordinary cash the auditor should always inquire as to whether there are any other funds in the custody of the cashier or other persons. It may be, for example, that there are undeposited receipts or unclaimed wages on hand, which may or may not be shown on the books. It is obvious that all cash on hand should be verified simultaneously. To do so it may be necessary to establish control over some funds until they can be verified.

If it should develop after the known cash funds have been counted that there is another fund which is held by the same cashier, the auditor should not hesitate to make a second count of the former; and if the amount involved is large or the circumstances are suspicious, a second count should be made even though the newly discovered fund is in the custody of another person. If it is known that the cashier also has custody of cash belonging to others, permission should be requested, of either the cashier himself or of the proper authority, to examine such cash. Unless all the cash is counted the auditor will have no assurance that he has verified the funds in which he is interested, except in so far as they may exceed any other funds held by the cashier, and he should mention the matter in his report.

Unless the visit is unannounced and it is therefore desirable to count the cash immediately, it is well to make the count at the close of the day after the cashier has balanced the cash. If the time of making the audit permits, it is also well to make the count at the end of the current month.

Having once announced his intention of counting the cash the auditor should proceed to do so at that time, and not agree to a postponement unless the reason given is obviously legitimate. The auditor might almost as well abandon his intention of counting the cash as to count it after he has given the cashier an opportunity to make good a shortage. If the auditor has stated his desire to count the cash at the close of the day and for some sufficient reason it is found to be impracticable to do so, it may be desirable, as when a large amount is involved, for him to keep the cash box or safe under control over night by sealing it. One form of seal is a well

gummed paper, which must be flimsy, bearing the auditor's signature, stuck across the crack; but the most satisfactory material is a fairly fragile tape, to be wrapped around the box or safe in such a manner that it cannot be removed without being broken, and secured at the ends by compression with a distinctive seal. A wax seal cannot usually be depended upon when applied to metal.

If the count of a cash fund has revealed conditions which are suspicious but are not conclusive of irregularity, such as the inclusion of checks or vouchers which are questionable, or if there has been an enforced delay in making the count which causes some suspicion, the auditor will do well to appear satisfied at the time and then after a few days insist upon counting the cash again.

Procedure.—The cashier or some other representative of the client should always witness the counting of the cash by the auditor. If the cashier starts to leave while the cash is being counted the auditor should insist upon his remaining and watching the cash, so that if a shortage should develop at that time or later the auditor cannot be blamed for it. There have been many cases where auditors have laid themselves open to suspicion of theft in connection with their count of cash or securities by not insisting upon the continued presence and attention of the persons responsible for the custody of the property. It is sometimes desirable, when there is a shortage or other irregularities are suspected, for the auditor to request the cashier to approve the record of the cash count made by the auditor, even if that entails a recount by the cashier.

In most audits all cash should be counted, excepting packages of coins of small denominations. In bank examinations, packages of twenty-five or fifty bills of small denominations (ones, twos, and in some cases, fives and tens) may be tested; or, where there are very large amounts, they may be accepted by merely thumbing them over to see that nothing but money is included; also, bags of specie may be tested by weight and by casual inspection to see that the metal is genuine. Frequently such bags are sealed by the mint or by other banks, when they may be accepted without verification.

The details of the cash counted should be listed on a sheet headed with particulars as to the fund and the time of the

count. The bills will usually be listed first, then the specie, showing the denominations and total of each. After that will be listed any checks, with particulars as to the date, drawer, endorser (if any), amount, and frequently the name of the bank and remarks as to the reason for the check being held.

Attention should be given to each check, in order to determine whether it has been cashed or has been received in settlement of an account. If the latter, investigation should be made to determine that it has been entered on the cash book as a receipt and is included in the cash balance which is being verified. Special attention should be given to any old or post-dated checks, as they may be worthless or may represent loans or advances which should not be included in the cash balance but in accounts receivable. There should be no occasion to include post-dated checks in the cash, for the reason that a check cannot be considered as cash at all when it is dated in advance.

If checks to any considerable amount are included they should be traced into later bank deposits, or if not deposited, and apparently collectible, transferred to accounts receivable. The inclusion in the cash of an uncollectible check which has been cashed or received in exchange for a check of the client should arouse suspicion of irregularity.

After the checks, will be listed any vouchers for expenses, receipts for advances, I.O.U.'s and other "cash items." All vouchers should be closely examined as to date, purport, and approval. They should then be listed in detail, except that usually there is no harm in combining several expense vouchers of the same class, such as freight and express bills, provided they are current. The fund should be cleared of expense vouchers at the end of the month, and especially at the end of the fiscal period, and if the cash is counted on or immediately before such dates and found to contain a considerable amount of expense vouchers, investigation should be made later to determine that they have been taken into the accounts as expenses of the period to which they apply.

The question frequently arises as to the propriety of leaving in the cash on hand, for balance sheet purposes, amounts which have actually been disbursed. In theory it should not be done, but in practice no harm can result from leaving com-

paratively small amounts representing current advances on pay-rolls or even small personal advances of a temporary nature which are properly approved and which the client prefers not to record on the books. As has been stated, all such items, as well as checks, should be closely examined, and if not current or properly approved they should be brought to the attention of the client in the report or previously, whether or not they are allowed to remain as part of the cash in the balance sheet. It may be, of course, that the items are uncollectible and should be written off. There should also be no objection to leaving in the cash small amounts of current expense items.

In connection with the transferring of cash items to accounts receivable or expenses, it should be noted that unless some good purpose is served thereby it is undesirable in most cases for the auditor to change the client's classification of accounts. It is often said that a balance sheet must disclose the actual facts, but in practice this must be qualified to the extent that due regard be given to the difference between essentials and non-essentials, and the common-sense rule be applied that no changes be made unless they are really material and necessary to a reasonably proper understanding of conditions. As to what is material in any case is almost always a question of relative importance. It might be necessary to adjust a cash fund of one hundred dollars on account of an overstatement of twenty dollars, but if the cash were ten thousand dollars, or even one thousand, such an adjustment would generally be absurd.

Another question that arises in connection with practical auditing procedure as applied to the verification of cash on hand is that of the necessity of counting all working funds. Much time has been wasted in verifying small funds and those located at remote points. It may be, for example, that a working fund of twenty-five or fifty dollars is kept at a branch or factory some distance from the main office and that it would take two or three hours to make the trip and count the fund. In such cases, it may very well be sufficient to obtain a signed statement from the custodian of the fund that the cash was in his possession on the date of the balance sheet, preferably showing the composition of the cash. Such a fund would not be unlike expense funds held by salesmen

and others, regarding which no verification is practicable other than an acknowledgment from the individual that he is accountable for the amount.

There is considerable difference of opinion among accountants as to the classification of working funds, such as traveling expense funds, in the balance sheet; some treat them as cash, others as accounts receivable, and others as deferred charges. All of these may be correct, depending upon the circumstances in the particular case. If the balances represent cash available for the payment of expenses or purchases, credit having been given for all, or nearly all, disbursements, the author can see no reason why they should not be treated as cash; if the amounts are due from former employees or are otherwise not being used currently as cash they may properly be classified as accounts receivable; and if a considerable proportion represents uncleared expenses, and it is impracticable to adjust the accounts so that they will in fact represent cash, they should be treated as deferred charges. Advances to salesmen for expenses which are deductible from commissions should not be treated as cash in any event.

It is proper to include railroad mileage, street car tickets, and comparatively small amounts of postage and revenue stamps in cash if they are so carried by the client. It is immaterial whether such items are included in the balance sheet as cash or supplies except that for the practical purposes of the client railroad mileage and car tickets are more properly carried in the cash, as they can be turned over to employees in lieu of cash for the payment of expenses. It is thought that any considerable amount of stamps should be carried as supplies rather than cash. Any such items as are carried in a cash fund should, of course, be counted.

If it is found that a cash fund of the business is being mixed with the personal funds of a cashier the practice should be brought to the attention of the client and be strongly condemned. This does not, of course, apply to funds advanced to individuals for such purposes as traveling expenses.

When the cash on hand is verified at a date different from that of the balance sheet or the end of the period under audit, it is necessary to reconcile the amount thus verified with the amount shown by the books at the latter date, in which the primary interest centers. In the case of an imprest fund, this

involves merely ascertaining whether the amount of the fund has changed during the interim, but that may necessitate examination of the entries of checks issued to determine that there has been no surreptitious increase in the amount of the fund to conceal a misappropriation. When the cash on hand is not separated in the records from cash on deposit it is necessary, as aforesaid, to verify them simultaneously, and the total will be reconciled as explained in the discussion of cash on deposit.

If the auditor is instructed not to verify cash balances which in his judgment should be verified he will, of course, qualify his report as to the limitation of the scope of the audit.

Chapter VIII

ASSET ACCOUNTS—Continued

Notes and Acceptances Receivable.

Before considering the procedure in verifying notes and acceptances receivable it is well to have a thorough understanding of what is comprehended in such assets. The notes receivable may be due from customers for the sale of goods, when they are generally known as trade notes, or may represent loans. They may also represent sales of plant or other property, but such notes are unusual and need not be considered as a class. A trade note may have been taken at the time of sale or may have been taken later in settlement of a past-due account.

In some lines of business (notably those where sales are made to farmers, such as the agricultural implement and fertilizer businesses), it is customary to grant long-term credit in the form of notes; but in most lines of business in this country, goods are sold on open account with short credit terms or are covered by an accepted draft, so that trade notes are likely to represent past-due accounts. From the standpoint of verification, the nature of the indebtedness evidenced by the note is immaterial; but for the purpose of properly stating the items in the balance sheet, the notes should be classified at least as between trade and loan notes and sometimes as to trade notes representing original transactions and those taken in settlement of open accounts.

Acceptances.—Acceptances receivable are put in the same class as notes receivable for the reason that from the auditing standpoint there is, or should be, no essential difference between an acceptance and a trade note. There is not even the difference which some believe there is, that an acceptance always represents the original transaction, as acceptances are frequently renewed. As acceptances are not generally well

understood, it seems desirable at this point to consider their peculiar characteristics.

A trade acceptance, as distinguished from a banker's acceptance, arises in connection with a domestic sale of goods. The seller draws a draft on the buyer, who accepts the draft, writing across the face "Accepted (date), payable at (place)", with his signature. The acceptance then constitutes a promise to pay the amount of the draft at its maturity, and is practically the same as a promissory note.

A banker's acceptance is the promise of a bank to pay, usually arising from foreign trade; drafts on banks in connection with domestic trade are almost always payable at sight. Bankers' acceptances are generally disposed of by the sellers of the goods and are therefore rarely encountered as receivables except as they may constitute temporary investments of purchasers of the paper.

The author is unable to see any objection to combining trade notes and trade acceptances receivable in a balance sheet. It may be desirable to show bankers' acceptances separately since they are generally regarded as exceptionally secure receivables.

Until the establishment of the Federal Reserve banking system in 1914, the use of acceptances in this country was limited almost entirely to import and export business, and acceptances of drafts—or bills, as they are usually called in foreign trade—were usually made by bankers on behalf of the purchasers, the sellers then having paper which could readily be sold in the foreign exchange market. The Federal Reserve Board has advocated, and encouraged by discounting privileges, the extension of the practice to domestic trade, and the national banks are now permitted to discount trade acceptances without the limitation of ten per cent of their capital and surplus which applies to other loans to any single borrower.

Principally as a result of the campaign of education by the banks, many concerns which formerly sold on open account or which took notes in settlement are now drawing drafts on their customers, payable at the same time as the open account or note would be, and the drafts are being accepted by the customers, thus furnishing evidences of the sale transactions which can be discounted by the sellers. In most cases

this practice is a distinct benefit to the seller as it tends to lessen disputes with buyers, loss of interest on overdue accounts, and loss from uncollectible accounts; and in many cases it obviates the necessity of assigning or pledging his accounts receivable for loans at exorbitant rates of interest. It is beneficial to the banks and to the public at large as it promotes liquidity of credit. A trade acceptance may be discounted by a bank, rediscounted by a Federal Reserve Bank, and used by it as the basis for the issue of currency.

Trade acceptances, being based upon actual transactions and bearing the names of the acceptor and the drawer, are generally regarded with more favor for rediscount purposes than single-name paper based upon the general credit of the borrower; in other words, it is generally considered better for the seller to dispose of his receivables, with his guaranty as to collectibility, than for him to retain them and borrow funds to enable him to carry them.

Procedure in Verification.

As stated in the preceding chapter, it is usually desirable to verify notes and acceptances receivable simultaneously with the verification of the cash balance, owing to the fact that otherwise the instruments may be negotiated or collected and the proceeds used to make up a shortage in the cash. Regardless of the procedure as to cash, it is desirable to verify the notes and acceptances promptly as of the date of the balance sheet, especially if there are many, on account of the greater facility of verification at that time.

Detailed schedules of notes and acceptances, prepared separately, should be made from the records as of the date of the balance sheet, showing as to each instrument the date, maker or acceptor, maturity, amount, collateral security, if any, and location, if shown by the records. Usually these schedules will also show the interest rate and the date, if any, to which interest has been collected. This latter is for use in connection with the accrual of interest, and may often be dispensed with when the interest feature is negligible or when the client's records are such that they can be utilized for that purpose.

After the notes and acceptances are listed, the method of

verification depends upon their status at the time of the audit. That may be any one of the following:

- On hand.
- Held by a bank or other agent for collection.
- Collected in full since the date of the balance sheet.
- Renewed, with or without a partial payment, since that date.
- Discounted, or sold with guaranty, before or since that date.
- Pledged as collateral to obligations of the concern before or since that date.

The procedure of verification under these several conditions will be discussed in the order in which they have been stated.

On hand.—In the verification of notes and acceptances on hand it is necessary to inspect each instrument and see that the particulars as to date, name, maturity, and so forth, entered on the schedule are correct. Special attention should be given to the name of the payee, and if it is other than the concern whose accounts are being audited the paper should be ascertained to be properly endorsed. Incidentally, the fact that an instrument was acquired by endorsement would generally indicate that it represents a loan or temporary investment rather than a direct trade obligation.

When the examination is being made subsequent to the date of the balance sheet, it is desirable to look for endorsements whether or not they are apparently called for, as a means of determining whether or not the instruments have been sold or pledged and have subsequently been reacquired. If endorsements show that the instruments have thus been negotiated, great care should be exercised in accounting for the receipt of the cash in connection with their disposal. This is especially important if the cash balance has been verified at a date prior to the examination of the negotiable instruments.

The auditor cannot be expected to pass upon the genuineness of signatures, and he need make no comprehensive investigations for that purpose. However, auditors have detected forgeries by casual inspection of signatures and thorough investigaion where appearances were suspicious.

Any collateral to notes or acceptances, in the form of securities, warehouse certificates, life insurance policies, other notes, or whatever else, which is called for by the records or by the instruments themselves, should be inspected or otherwise accounted for. If the paper is on hand there should be no reason for the collateral being elsewhere, but if the paper has been discounted or pledged the collateral will probably have accompanied it and should be verified accordingly, as hereafter explained.

Held by others for collection.—Notes and acceptances held for collection by banks, mercantile agencies, attorneys, or others should be verified by obtaining confirmation from the custodians. The usual and most satisfactory method of doing this is for the client to address a letter to the custodian stating that on a certain date the instruments in question, described in detail, were shown by the records as having been held by him or it, and requesting that the list be certified and returned directly to the auditor.

Where paper is regularly deposited with a bank for collection and entered in a pass book, the entries in that book may be accepted in lieu of an independent confirmation if the deposits are all of recent date and otherwise appear to be regular. Other forms of acknowledgment, such as receipts or correspondence, may likewise be accepted if they are of recent date and there is no probability of the cash having been received and diverted. Where the number of instruments deposited for collection is considerable, a request for confirmation, to be effective, must be made promptly, as banks do not usually keep good chronological records of the details of such transactions and they are therefore not always able to furnish a certificate as of a past date.

Collected in full.—When notes and acceptances have matured and been collected in full between the date of the balance sheet and the time of their verification, it is usually necessary only to see that the amounts are entered as cash receipts. If the amounts are especially large or there are other unusual conditions, it may be necessary to trace those particular receipts into the bank deposits, or even to carry the cash audit up to the date of the verification of the negotiable instruments.

The procedure would be the same in the very unusual case

of a sale of a note or acceptance without recourse as for a collection in full. If paper is said to have been sold without recourse, the auditor should demand corroborative evidence, usually documentary, to that effect.

Renewed.—The renewal of notes and acceptances constitutes at least prima facie evidence that they are doubtful of collection. This evidence is, of course, subject to refutation; but knowledge of the renewal is notice to the auditor that the matter should be investigated.

When instruments have been renewed between the date of the balance sheet and the time of verification, any cash received on account should be traced into the books in the same manner as stated above for collections in full. The new instruments should be inspected and appropriate notations be made on the working schedule.

Discounted or sold with guaranty.—When notes and acceptances are shown by the records as having been on hand at the date of the balance sheet but subsequently discounted or sold with a guaranty as to payment, the method of verification is essentially the same as when they have been collected; that is, the proceeds should be accounted for as having been received. If the paper has been sold the purchaser may have withheld a percentage of the amount in accordance with arrangement, in which event it should be ascertained that the deficiency has been charged to the purchaser or that the whole amount has been left in the notes or acceptances account and the proceeds taken up as a liability. There is usually no necessity of obtaining an independent confirmation from the discounting or purchasing institution with respect to paper which had not been thus disposed of at the date of the balance sheet.

Consideration of the subject of notes and acceptances receivable which were discounted or otherwise disposed of under guaranty at the date of the balance sheet, opens up a wide field of discussion. Most of the questions in connection with this matter perhaps properly come under the head of practical accounting rather than auditing, but the subject seems to merit some consideration here.

In the first place, there is no essential difference, from the standpoint of the auditor, between the discounting of notes and acceptances receivable and their sale or assignment

(which may be regarded as synonymous) under an agreement with the purchaser or assignee whereby payment is guaranteed. There is, however, a legal distinction between the two methods of disposal which the auditor should in some cases observe in the preparation of the balance sheet, notably where instalment paper is taken and disposed of.

It may be literally improper to carry as current assets and current liabilities, respectively, the amounts of receivables sold and the amounts realized from their sale, for the reason that the assets have been definitely disposed of and the amounts received constitute payment therefor and not loans. In the case of the ordinary negotiation of such instruments by the payee for cash, commonly called discounting, the receivables under discount may be regarded as current assets and the amounts received therefor as current liabilities, upon the theory, which is in accordance with the most conservative view, that in effect there is a direct obligation to the discounting institution and that the paper discounted is merely security therefor. However, if the instruments have not matured and are otherwise valid, it is equally proper, and is the general practice, to regard them as contingent, rather than current assets, and the amounts received as contingent liabilities; in other words, to treat the amounts as receivable and payable only in case of the default of the primary obligors to make payment to the discounting institution. The latter principle applies to receivables sold with a guaranty as well as to those discounted, and it is customary for auditors to treat both classes of transactions alike in showing the amounts as contingent assets and liabilities, provided none of the instruments is past due. In either case, if an instrument is past due the liability is current and the asset is current if collectible.

When notes and acceptances are discounted or sold with a guaranty, and the full amount is realized at once (less any discount), it is the usual bookkeeping practice to credit the cash received to the notes or acceptances account as though the instruments were collected, thus causing them to disappear from the accounts. If the notes are sold and the purchaser withholds a percentage as security, as is frequently done in such cases (although more frequently in the case of accounts receivable), the face amounts of the notes may be cleared from the accounts and the amount withheld charged

to the account of the purchaser, or the amount received may be credited to the purchaser—either in a separate ledger account or to the controlling account for notes receivable with a memorandum account in the detail record. Under all these conditions, except the one where notes have not been cleared from the account but partial collection has been carried to a separate credit account, there will be no indication to the auditor in the balance of the notes or acceptances account that instruments have been discounted or sold with a guaranty.

It is essential that full particulars as to discounts (the term is now used as inclusive of all such transactions) be ascertained, on account of their bearing upon the financial condition. To do so, one of three courses may be adopted, namely: (1) analyze the controlling accounts for notes and acceptances in detail for at least six months prior to the date of the balance sheet, accounting for each instrument; (2) if the subsidiary record appears to be complete and reliable, compile from it a list of the instruments discounted as well as those constituting the balance of the account; (3) if it appears that all discounting has been done with certain institutions, request them to furnish the desired information. The depositary banks should do so in any event if a form of certificate similar to that shown in Chapter VII (page 93) is used.

The most satisfactory of these three methods, in nearly all cases, is the first-named, supplemented by confirmations obtained from the financial institutions concerned. The latter should not be dispensed with, even though the records appear to be reliable, because notes or acceptances may have been received and discounted without any entry having been made in the accounts and records kept for that purpose.

When the proceeds of discounting are to be treated as contingent liabilities, there is special need of inquiring into the subsequent disposition of the items. This is usually practicable, however, only when the audit is made at a later date. It is desirable to determine whether the paper has been taken up by the primary obligors for two reasons: namely, in order that the proceeds of any paper which has been dishonored may be treated as a current liability; and that if all, or a con-

siderable part, have been honored, the fact may be stated in the report as a favorable point.

The foregoing remarks regarding the disposal of acceptances apply only to trade acceptances. In the case of bankers' acceptances the contingent liability feature may be ignored.

Pledged as collateral.—In the somewhat rare cases where notes and acceptances receivable are pledged as collateral to notes payable or other obligations they should be verified by confirmation obtained from the pledgee, in conjunction with the similar verification of the indebtedness. The form of certificate of bank balance and liabilities given in Chapter VII, previously referred to, provides for the bank's showing such collateral. Another method is to have the client address a letter to the holder of the paper reciting the details as to the obligation and collateral, as shown by the records, and requesting that confirmation thereof be forwarded directly to the auditor. A copy of the letter requesting the confirmation would be retained by the auditor in his papers until the receipt of the confirmation.

If the notes or acceptances were pledged at the date as of which the audit is made that fact should be stated in the balance sheet.

Past-due.—Notes and acceptances which are past due should always be subjected to close scrutiny, in relation to both their validity and their collectibility. Of course a reasonable time should be allowed after maturity for collection, but after that time it is a proper assumption that the paper either has been collected or is doubtful of collection. As to the former, the auditor should satisfy himself that payment has not been made, either by obtaining confirmation of the debt or by the inspection of correspondence or other evidence. As to collectibility, the instrument may be regarded as an account receivable and be considered in conjunction with any indebtedness of the maker or acceptor on open account. As past-due notes and acceptances are no longer negotiable, and differ from open accounts only in that they constitute prima facie evidence of the debts, it is customary to transfer them back to the accounts receivable.

If any considerable time has elapsed between the date of the balance sheet and the time of the audit, the auditor will have an opportunity to form a fairly conclusive opinion re-

garding the collectibility of any past-due paper. The best evidence of the collectibility of any receivable is that it is collected within a reasonable time after maturity.

All notes and acceptances determined to be uncollectible should be written off, and full provision should be made for expected losses or those which appear to be doubtful of collection. In the determination of probable losses the estimated value of any collateral should, of course, be taken into consideration. The auditor should usually comment in his report on the apparent collectibility of the paper, and in some cases set up a reserve for the amount considered by him to be a necessary provision for uncollectible or doubtful items.

Confirmations.—The question is frequently raised as to whether it is necessary to obtain confirmations from the makers and acceptors, respectively, of notes and acceptances receivable. It is generally regarded as unnecessary to do so under ordinary conditions, especially as to trade paper and, in the case of banks, unsecured time loans. It should be remembered that negotiable instruments are evidences of debt, in a form whereby they are transferable by endorsement and delivery, and that, prior to maturity, they are virtually incontestible when held by third persons. It should be remembered further, that if any payment is made on account (which is unusual in the case of an unmatured time note or acceptance) it is incumbent upon the person making the payment to see that it is endorsed upon the instrument itself, or he may be called upon to pay the full amount if the instrument should be negotiated to a third person. It seems, therefore, that it is generally unnecessary to obtain another acknowledgment of the debt.

However, there are cases where it is desirable to obtain confirmation of notes representing loans, particularly where the notes are payable on demand or are past due and where they are secured by collateral. There may be danger of partial payments having been made and not credited, notwithstanding the jeopardy to the maker as stated above; or a past-due instrument may have been collected in full; or collateral may not be specified in the note, or if it is, substitutions may have been made, so that it is not known definitely whether all the collateral has been accounted for.

It may be argued that the obtaining of confirmations is

desirable for the purpose of proving the legitimacy of the instruments; that is, to detect any forgeries. It seems unnecessary to go to the length of confirming all notes and acceptances for this purpose. Manifestly, if any signature appears suspicious the matter should be fully investigated. Inquiry should be made regarding the identity of the makers of all notes other than trade paper. Satisfactory assurance as to the validity of trade notes and acceptances can usually be had by examination of the charges to the controlling accounts coupled with the process of verification as here outlined.

Collateral security.—It has already been stated that any collateral security to notes and acceptances should be verified concurrently with the instruments themselves. Such security is seldom held for paper other than notes representing loans. It is often desirable to classify such notes in the balance sheet as to those secured, partly secured, and unsecured.

When an auditor states that a receivable is secured, a reader of his report is justified in assuming that it has been determined that the collateral may be realized upon at a value equal to the amount of the indebtedness. It is therefore incumbent upon the auditor to ascertain the value of the collateral, or if it is impracticable to do so to state the facts in his report. He may either refrain from mentioning the matter of security in the balance sheet or may show notes said to be secured somewhat as follows: "Notes receivable (stocks pledged as security; value not determined)". There should be no such difficulty in the case of paper admitted by the client to be only partly secured.

CHAPTER IX

ASSET ACCOUNTS—Continued

Accounts Receivable.

Accounts receivable may be said generally to comprise the following:

Customers' accounts—representing sales.
Loans or advances to individuals and companies on current account—other than advances for traveling expenses, etc., to be specifically accounted for.
Claims against carriers, insurance companies, etc.

All these accounts may be carried together, either in the general ledger or in a subsidiary ledger, but in most cases the customers' accounts are carried in one or more subsidiary ledgers with corresponding controlling accounts in the general ledger, and the miscellaneous accounts are carried in detail in the general ledger. Any such differences in bookkeeping methods do not essentially affect the character of the accounts, but the separation of customers' accounts introduces some different elements of procedure in that they are dealt with as a group, thus simplifying the auditing in some respects.

Consideration will first be given to customers' accounts, and it will be assumed that they are carried in a subsidiary ledger.

Customers' Accounts.

Trial balance of subsidiary ledger.—The first step in the verification of customers' accounts is to determine whether the aggregate of the balances of the detail accounts in the subsidiary ledger is in agreement with the balance of the controlling account in the general ledger. It seems axiomatic that this must be done, but if auditors had always done

it many irregularities would have been discovered sooner than they were.

When it is said that the establishment of agreement between the subsidiary ledger and the controlling account is the first step in the verification of the accounts, it is not meant that this should be done independently, without regard to what is to follow; but rather that it is fundamental to the whole process of verification, and although the procedure in other respects is variable this is indispensable.

There are several ways of establishing agreement between the detail accounts and the control, and thus proving that the former constitute an integral part of the general accounts that are being audited. The desirable procedure is dependent upon the conditions prevailing in each case with regard to the extent to which the verification of the balances and reporting thereon are to be carried and to the possible utilization of the work done by the office force. There are three questions to be considered relative to the scope of the work; namely, whether the balances are to be confirmed by the debtors, whether the detail accounts are to be shown in the report, and whether it is desired to report in detail as to the age of the charges. If any of these is to be done it is usually necessary to draw off a complete schedule of the accounts, in a form suitable for the purpose. In the absence of such requirements the trial balance drawn off by the office force may be checked and footed, and the only record needed in the audit working papers will be a summary of totals of debits and credits and information regarding apparently doubtful accounts, with perhaps some other pertinent remarks; if there is no available trial balance to check, one can be made in skeleton form, that is, with amounts only, by adding machine or otherwise.

The reason for showing the composition of the aggregate of the accounts as between debit balances and credit balances is that the credit balances which are not offset by debit balances with the same individuals or companies, and therefore deductible therefrom, should usually be included in the accounts payable on the balance sheet. The only exception to this is where the client treats the balances net and the credits are so small that their classification would have no prac-

tical bearing upon the financial condition, when no adjustment would seem to be called for.

When the accounts are out of balance.—Thus far it has been asumed that the detail balances are in agreement with the control. If the accounts are out of balance the auditor must use his discretion as to the time he spends in endeavoring to establish agreement. In the first place he must make certain that his trial balance is correctly drawn off. Then he should try to determine whether the balances have previously been in agreement, as it may be that the difference is of long standing. Then he should take into consideration the character of the difference and the probability of its having arisen through error or fraud; an excess of detail balances will not usually cause so much concern as the reverse condition. It may be that the difference will be regarded as relatively inconsequential and no investigation will be made, in which case it will probably not be considered necessary to mention the matter in the report.

Before undertaking any extensive work in endeavoring to locate such a difference it is usually desirable to bring the matter to the attention of the client, in order to obviate any future misunderstanding with regard to the fee or to arrange for additional compensation in case a fee has been quoted based upon the assumption that the books are in balance. Such clerical work as locating differences in trial balances is not usually regarded as contemplated in auditing procedure. If the client does not desire to have the necessary work done, the auditor should state the facts in his report—both as to the accounts being out of balance and as to the instructions received in relation thereto.

If the work of effecting an agreement is undertaken it will usually involve a detailed verification of postings to the individual accounts and of the footings of those accounts and possibly also of the original records.

Tests of trial balances.—There are some cases, where there are very many accounts receivable and very good systems of internal control, when the auditor is justified in testing the trial balances of the detail ledgers, by selecting certain ledgers or parts of the trial balances to check. It seems almost unnecessary to state that this procedure should be adopted very cautiously if at all.

Examination of controlling account.—Whatever goes into the detail accounts must also go into the controlling account, or else the books will be out of balance. It follows that, if they are in agreement, determination of the character of the entries in the controlling account establishes also the constituent elements of the balances of the detail accounts. To illustrate: if it is determined that all charges to the controlling account represent sales it follows that the charges to the detail accounts, and the balances therein, represent nothing but sales; likewise, if all the credits to the controlling account have been determined to be cash properly recorded as received, and allowances and similar items properly approved, it is known that there have been no improper credits to the detail accounts.

It will be seen, therefore, that it is necessary to thoroughly test, if not completely check, all postings to the controlling account and to foot the account. This is not usually an arduous task, and when it is done, and the detail balances are found to be in agreement with the control, the checking of postings to the detail accounts may almost always be dispensed with.

Examination of detail accounts.—Each detail account should be carefully examined. The points to be considered are generally as follows:

Name of the account.
Proof of the balance.
Age and collectibility of the balance.
Postings (under certain conditions).

Name of the account.—Notwithstanding what has been said regarding the entries in the detail accounts merely reflecting the composition of the entries in the control, it is necessary that attention be given to the name of the account for the purpose of determining that it appears to be in fact an account receivable. Instances have been known where an expense account was included in the accounts receivable, and it may very well happen that a charge to such an account would originate in a sales invoice. Consignment accounts must also be eliminated. Further, it may be desirable to separate the accounts of affiliated companies or others, even though they represent sales.

Proof of the balance.—The balances of the accounts as shown should not be accepted without proof of their mathematical accuracy. It would seem that such proof is not necessary if the balances are to be confirmed by the debtors, but there is always the chance that some balances may not be confirmed and those might be the very ones to be incorrectly stated. The detail balances shown might aggregate the correct amount but some might be overstated and some understated—by mistake or design. It might be, for instance, that a sale had not been charged to an account, with the intention of misappropriating the cash when received, and the footing of another account increased by the same amount; or an account may have been credited with cash received which was misappropriated and not entered on the cash book, and thus not credited to the controlling account, and the balance of another account correspondingly increased.

Unless it can be seen at a glance that the balance of an account as shown is represented by one or two open items, the debits and credits, or at least those not plainly offset, should be footed and the total credits should be subtracted from the total debits to establish the balance.

Age and collectibility of the balance.—Before undertaking any work in connection with determining the age of the charge or charges constituting the balance of an account it is necessary to ascertain the credit terms on which sales are made. An account might be old, and therefore appear to be doubtful of collection, if the terms required settlement in thirty days, but reasonably current if the terms were sixty or ninety days.

The only reason for examination of the accounts as to the age of the charges is to determine their probable collectibility. It follows, then, that no work should be done in the analysis of the accounts with respect to the age of the charges unless it has a practical value in the accomplishment of that purpose. A complete analysis of the accounts as to age is usually a laborious task and when completed is likely to be of only academic interest. It should be undertaken only when specifically requested by the client or in case the accounts as a whole show evidence of laxity in prosecution of collections and it is desirable to present elaborate comments on the subject in the report. In this connection, consideration should

be given to the relation of the total of the accounts receivable, as shown by the controlling account, to the gross sales of the latter months of the period, in order to ascertain the average age of the accounts.

If it appears to be desirable to analyze the accounts completely, it will usually be found advantageous to make the analysis an extension of the accounts-receivable trial balance by listing the accounts, by name or by ledger folio, on a columnar sheet and extending the amounts in columns headed for the respective periods. If only the ledger folios are listed it will be necessary to add the names for balances considerably delinquent, for the purpose of later discussion as to their collectibility. In some cases where there are a great many accounts, it is possible and thoroughly practicable to have this work done by the bookkeepers; or the information may be available in the credit department.

Under ordinary conditions, it is necessary only to make a memorandum, in conjunction with the checking of the trial balance (but on a separate sheet) of the names, dates, and amounts of old balances, possibly with some classification such as accounts past-due three months, four to six months, seven to nine months, ten months to a year, and over a year. Past-due notes receivable which have been charged back to the accounts receivable are in a class by themselves. Such charges to the accounts, as evidenced by the controlling account, should be followed up to see whether principal and interest have been collected. If not collected within a reasonable time they may be assumed to be at least doubtful of realization.

The best evidence bearing upon the collectibility of an account at the date of the balance sheet is whether or not it is subsequently collected. This seems so obvious as not to need mentioning, but the author has found that its significance has frequently been overlooked. The determination of the collectibility of the accounts is simplified in proportion to the time elapsing between the date of the balance sheet and the date of examination of the accounts. In any scheme of analysis of the accounts as to age, the subsequent collections should be taken into consideration; if a complete analysis is made a column should be provided for such collections, and the age of such balances at the date of the balance sheet

should be disregarded, unless it is desired to make a very extensive investigation into the effectiveness of the collection methods.

The accounts considerably past due having been listed, they should be discussed in detail with the person most familiar with credit matters, unless there is a reserve for doubtful accounts which is obviously adequate, and even then it is often desirable to do so for the purpose of furnishing information in the report. Inquiry should also be made as to whether there are expected losses on other accounts, which appear to be current. While the auditor is not justified in wholly accepting the usually optimistic opinions of the client or his representative with regard to the collectibility of the accounts, he should recognize that they are in a better position to judge of such matters than he is. He should consider all the available evidence as to each account, and then formulate an opinion of his own regarding the amount that may be uncollectible or doubtful. In this connection, partial collections being made on an account should be accepted as fairly good evidence that the balance will eventually be collected in full.

Accounts that appear to be definitely uncollectible should be written off, and a reserve should be established for the amount regarded as doubtful. This is subject to qualification with respect to concerns that carry credit insurance, but even in such cases there is usually a stipulation in the policy to the effect that a certain amount of the loss must be borne by the insured. If full provision for probable losses is not made on the books the auditor should use his judgment, in view of the circumstances in the particular case, as to whether he should adjust the accounts in the preparation of his statements or merely report the condition of the accounts in his comments.

Instalment accounts.—The instalment accounts carried by retail dealers in such merchandise as furniture, pianos, and phonographs, have some distinctive features. The merchandise is usually sold under an agreement whereby title to it is retained by the dealer until the payments are completed, but sometimes title is transferred and a chattel mortgage is taken. Such security is adequate only if a substantial first payment is made and the instalments are kept up, as the merchandise

may deteriorate in value very rapidly and the cost of repossessing and reconditioning may be considerable.

In the examination of such accounts it is necesary to establish the existence of the agreements, which may usually be limited to tests. Special attention must be given to the credits for collections, to see that no considerable proportion of the instalments is delinquent. A good general idea of the collections can be obtained by study of the credits to the controlling account in relation to the charges. Consideration should be given to the matter of proper credit being passed to delinquent accounts for repossessed merchandise.

Many, but not all, instalment dealers have large losses from uncollectible accounts, and it is therefore usually necessary to carry a comparatively large reserve for that purpose. In this connection, it should be noted, however, that instalment dealers are permitted to report their income for tax purposes upon the basis of collections rather than sales, and when this privilege is exercised a dealer should not be expected to make provision for the loss of his profit before the profit is taken into the accounts. In any case where there is likelihood of loss of the cost of the merchandise as well as the profit, provision should be made therefor as soon as possible. It is much better to defer recognizing profits than losses.

The foregoing remarks apply equally when instalment contracts have been sold with a guaranty as to collection.

Postings.—It has been stated that when the postings to the controlling account have been verified, and the subsidiary balances found to be in agreement, it is seldom necessary to check the postings to the detail accounts; but that it may be necessary to do so to locate a difference between the aggregate of the detail balances and the control. In a complete audit it may also be considered desirable to test the postings to the detail accounts as supplementing the other examinations for the detection of fraud. It appears, however, that if all the processes outlined in the foregoing have been carried out, including the proof of the footings of the detail accounts, it should be unnecessary to check the postings to the detail accounts unless there is a fairly definite suspicion of irregularity through failure to charge an account for a sale or through the entry of a credit to a detail account which is not reflected in the controlling account. If the postings are to

be verified, the charges should be checked from the sales record to the ledger and the credits from the ledger to the cash book or other record, the principal purpose being to detect charges appearing in the sales record but not carried to the ledger accounts, and credits to the ledger accounts not supported by the original records.

Confirmation of Accounts Receivable.

Consideration of the subject of confirmation of accounts receivable involves, first, the reasons for carrying the verification of the accounts to that extent, and second, the methods of procedure. In its application the subject comprehends all classes of accounts receivable with the exception of accounts in litigation and otherwise known to be disputed and some special accounts such as claims and open C. O. D. items.

Next to the actual collection of an account the best proof of its correctness is an acknowledgment by the debtor. The next best proof is notification to the debtor that he stands charged with the amount, with the request that he advise as to any exceptions he may take. The definite acknowledgment by the debtor, which will be called positive confirmation, is, of course, the only conclusive evidence of the validity of the account that may be obtained independently of the records, other than the actual collection of the account. The alternative method of requesting the debtor to advise only if any exceptions are taken to the account as stated, which will be called negative confirmation, is at best only a substitute to be employed when the obtaining of positive confirmation is thought to be impracticable. Its value is predicated upon the presumption that the debtor, for his own interest, will respond in case he does not admit the propriety of any charges against him, which is not an unreasonable hypothesis. The positive confirmation is therefore the more satisfactory from the standpoint of the results to be attained, but in perhaps most cases where there is no definite suspicion of fraud the negative confirmation may be accepted as a practical substitute, especially if there are many accounts, when the negative form of confirmation involves considerably less expense than the positive.

Under what conditions is it necessary or desirable to request confirmation of the accounts? As already stated, the only absolute proof of the validity of an account is its collection or an acknowledgment by the debtor. It is, of course, possible in many cases for the auditor to trace each charge to its source, not only to the shipping records, but to the customer's order, but this is impracticable as general procedure. Unless fraud is suspected the economical conduct of an audit precludes extending the examination of such charges back of the billing records. It will be seen that a great deal is assumed if the accounts are accepted as shown by the books when the charges are substantiated only by examination or test of the records of billing, or, when the accounts do not represent sales, of other records.

If it is impracticable to derive satisfactory assurance from the records as to the validity of the charges as a result of a complete audit, it follows that very little can be had as a result of a balance sheet audit, when there is no systematic examination of the underlying records. Further, unless a complete audit is made, involving verification of the cash receipts and disbursements, there can be no assurance, except, possibly, as to a very limited proportion of the accounts, that, if the charges are legitimate, the amounts have not already been collected. These possible exceptions are the charges that are not yet due in accordance with the earliest dates for settlement.

Before formulating any conclusion as to the necessity of requesting confirmations from the debtors, it is necessary to give consideration to the client's accounting organization and methods, which, as previously stated, are a large factor in the determination of the extent to which many features of an audit should be carried. It may be that the accounting and the handling of cash are so organized that it would be virtually impossible for excessive charges to be made to an account receivable or for cash received not to be properly credited. On the other hand, the methods may be so loose that either of these conditions might easily exist.

In view of the foregoing it appears that in a balance sheet audit the accounts should be confirmed unless there are especially effective internal safeguards; and that in a complete audit it is not usually necessary to obtain such confirmations

unless the internal methods of control are comparatively ineffective.

If the auditor decides that it is desirable to have the accounts confirmed he should, in almost all cases, discuss the matter with the client and have an understanding to that effect before proceeding with the work. Of course the client would have to approve the requests for confirmation before they went out, but his authority should be obtained before undertaking any part of the work. The only exceptions to this would be where the accounts were very few in number and the additional work involved in obtaining the confirmations would be negligible.

The reasons for having an understanding with the client before proceeding to request confirmations of the accounts are that the work involves extra expense to the client and that opinions differ as to the necessity and expediency of the procedure. It is not regarded as standard practice by a large proportion of the representative practitioners of the profession. The author had occasion recently to canvass a considerable number of prominent professional accountants and found that there was a decided absence of unanimity as to the wisdom of the adoption of a general policy of even suggesting to clients that the confirmation of accounts receivable is desirable. Whatever disagreement there may be among accountants themselves is, of course, on practical rather than theoretical grounds; and the controversial points in that regard relate principally to the general conception on the part of the public of the auditor's duties and responsibilities and the extent to which the records may be accepted in auditing by tests. This lack of unanimity among professional auditors is important only as showing that even though the auditor in any case may decide that the conditions are such that the accounts receivable should be confirmed, he is hardly warwanted in proceeding with the work and thereby incurring expense for the client without first obtaining authority to do so.

Aside from the question of expense, there is the possibility of the client's objecting to the procedure on the ground of the expediency of circularizing his customers. Many clients are so concerned with fostering the good will of their customers that they are loath to take any action that may possibly

be regarded by the customers with disfavor, and they are fearful that a request for confirmation of an account may be construed as a request for settlement or otherwise cause annoyance to the customer. This notion is largely fallacious, especially when care is exercised in the wording of the request for confirmation, and the auditor should be able in most cases to dispel any such fears on the part of the client by pointing out that the practice is no longer a novelty, as business men are now fairly accustomed to receiving such requests, and that the advantage to him in obtaining assurance that his accounts are correct far outweighs any possibility of the disturbance of satisfactory relations with his customers.

In the discussion with the client regarding confirmation of the accounts, it is usually desirable to present for his consideration the two alternative methods of confirmation, which have heretofore been described as the positive and negative methods, and to explain their relative merits. This should be done especially when the question of expense is a factor in the determination as to whether or not the work will be done. The positive method involves more expense on account of the additional labor in checking up and tabulating the responses and of the additional postage and stationery required.

If possible the arrangements for confirming the accounts should be made before the date as of which the balances are to be verified so that the work can be undertaken promptly on that date, as an attempt to obtain confirmations as of a date considerably past is almost futile. To effect the arrangements in advance involves, of course, a preliminary survey of conditions bearing upon the necessity of confirming the accounts, unless the client expresses his willingness to have the work done without such survey, as should be the case if only a balance sheet audit is to be made.

In many cases the auditor's requirements can be met by confirming only the past-due balances, or all the balances in excess of a certain amount, or a certain number of the accounts selected at random. If it is impracticable to obtain confirmations of the accounts as of the date of the balance sheet, virtually the same results may be obtained by doing so one, two, or possibly more months later. Such verification as of a subsequent date, unless it is considerably later than the date of the balance sheet, may properly be accepted as

confirmation of the accounts in total shown in the balance sheet when accompanied by tests of the charges and credits to the accounts in the intervening period.

If the auditor has recommended to his client that the accounts be confirmed and authority to do so has not been granted, he should mention the matter in his report. The prominence to be given to such a qualification in the report is a question to be decided in the light of its relative importance. If conditions are such that the auditor can assume no responsibility for the accounts without extending the scope of his work, the qualification should appear in the certificate (if one is rendered) or on the balance sheet; but if the conditions may be said to be average, or not to cause an unusual degree of apprehension, it is thought that the auditor is sufficiently protected by an assertion in the comments to the effect that the accounts were not confirmed by the debtors.

Procedure in obtaining confirmations.—As has been stated, the only practicable time to undertake the work in connection with confirmation of the accounts is promptly at the date as of which they are to be verified. There are two reasons for this; namely, that the requests for confirmation should accompany the client's statements, which are usually sent out promptly as of that date, and that it is very unsatisfactory in most cases to attempt to obtain confirmation later, on account of the confusion due to subsequent transactions. It is difficult enough to establish agreement between the creditor's and debtor's accounts by correspondence at a current date, largely owing to the lack of precision and general carelessness of the respondents; and it is infinitely more difficult to reach an understanding at a later date. Moreover, it is doubtful whether the debtor would pay the same attention to a later request for confirmation that he would to one accompanied by a regular statement of account which he would examine in the ordinary course of business. Many concerns have adopted the policy of never paying bills, other than those discounted, except upon the presentation of a statement.

The proper procedure, then, is for the auditor to be on hand when the client's statements are prepared by the office staff as of the date of verification. The auditor should draw off a trial balance for his papers, showing the names and

amounts. Sufficient space should be left on the trial balance for a complete record as to the confirmations, in addition to any that may be required in connection with the analysis of the balances as to the age of the charges, as mentioned previously.

If positive confirmations are to be requested the items of the trial balance, or schedule, should be numbered, and the numbers entered on the confirmation forms. A column of the schedule is needed for a date or other indication that the form has been sent out; another for the amounts confirmed, that is, for which the forms are returned without qualification; and plenty of space for remarks regarding differences to be investigated and adjusted. It may also be necessary to have a column in which to extend and total the amounts of accounts for which confirmation forms were not sent out, the reasons therefor being shown in the "remarks" column. For negative confirmations, the same form of schedule is required except as to the numbers of the items and the amounts of the accounts confirmed.

The statements as prepared by the office staff should be turned over to the auditor, together with addressed envelopes. The envelopes will usually also be stamped by the office force, but it is a matter of minor detail as to who affixes the stamps so long as the envelopes are not released by the auditor to the office force after comparison by him. The confirmation forms, for use in positive confirmations, may be filled in by either the office staff or the auditor, depending upon which can do it most expeditiously. The forms must be approved by the client in some manner, unless they are specially prepared for the audit, in order that the request for confirmation may be granted by the debtor. It is desirable that this be done in advance so that the auditor can retain control of them after they have been checked by him; otherwise, it might be necessary to examine them again before mailing.

Assuming that the confirmation forms are approved and are filled in, as far as possible, by the office staff, the auditor will proceed to compare the name and amount as shown on each statement and confirmation form with that shown on the schedule; number the confirmation form; indicate on the schedule that the statement and form have been passed; and

compare the address shown on the envelope with the most reliable information at hand. It is desirable, and usually practicable, to have the statements for comparison at the same time as the schedule is drawn off, which makes one operation of the whole process. If that is done, the address shown on the envelope should be compared with that shown by the ledger account; but if the statements are received after the schedule is drawn off the address on the envelope should be compared with that shown on the statement. The auditor should enclose the statement, confirmation form, and (for positive confirmations) a stamped return envelope addressed to himself, and seal and mail the envelopes himself (by this is meant, of course, the auditor or his representatives, as distinguished from the office staff).

The reason for the auditor's personally attending to the routine of sealing, mailing, and so on—which applies to virtually all confirmations and certificates in auditing—is to guard against the possibility of failure to detect irregularity by permitting an interested person in the organization to obtain possession of the confirmation form and either destroy it or forge a confirmatory signature. This introduces consideration of two subjects; namely, forgery and false addresses. As to the former, the auditor need not be particularly concerned, as it is impossible for him to detect forgeries except in the most glaring cases, and if he adopts all reasonable precautions in other respects he is immune from criticism in case it should subsequently develop that forgery has been committed.

As to the matter of addresses, it is the consensus of opinion among representative professional accountants that the auditor is justified in accepting the addresses furnished by the client's clerks. It would certainly be impracticable under ordinary conditions for the auditor to refer to the files for the addresses of customers. As previously stated, the addresses furnished by the office staff may be compared with those shown by the ledger accounts if convenient, but if it is inconvenient to do so, in the opinion of the author there is not enough advantage to be gained to warrant listing the addresses on the schedule or going through the ledger for that specific purpose. It would be highly undesirable in most

cases to check the statements to the ledger before drawing off the trial balance, on account of the consequent uncertainty that all statements were sent out. As a precaution against the use of incorrect or fictitious addresses the auditor may use his own envelopes or stamp his address on those of the client, so that in the event of non-delivery by the post office they will be returned to the auditor.

Confirmation forms.—There are many forms for confirmation of accounts receivable, any number of which serve their purpose satisfactorily. In perhaps most audits where there are many accounts, special forms are designed and printed to meet the requirements and views of the individuals concerned. It is desirable, however, for the practitioner to have a form of his own that he can use when a special form is not required, or as a model when one is wanted.

Form of request for positive confirmation.—The form shown on the opposite page meets the requirements of a positive confirmation in practically all cases. The name and address of the debtor may or may not be provided for; in the illustration they are. The form may be printed to such a size that the lower half, to be returned to the auditor, can be enclosed in a standard-size return envelope without folding. The signature of the auditor is in this case printed but the form may be changed so as to have it written. The form provides for confirmation of credit balances as well as debit balances, by merely striking out "debit" or "credit" as the case may be. If this provision is unnecessary the word "credit" may be omitted.

Form of request for negative confirmation.—The request for advice as to any exceptions that may be taken to the account as stated may be a separate card or sheet enclosed with the statement or pasted to it or may be printed or stamped on the statement itself. The precise method is entirely a matter of personal preference but the author is disposed to favor a printed form that is part of or attached to the statement—preferably printed at the top of the statement, but if impracticable to do so on account of space limitation, on a separate form to be pasted to the statement. The most important requirement is that the debtor be requested to advise the auditor directly as to any differences.

BLANK & BLANK
Certified Public Accountants
110 Broadway
New York

....

....

DEAR SIRS:

In connection with our audit of the books and accounts of

....

we are enclosing their statement of your account as of.......... 19.... Please examine it and advise us on the attached form of its correctness or of any exception you may take thereto. A stamped and addressed envelope for your reply is enclosed.
APPROVED:

.... BLANK & BLANK

(This is merely a request for confirmation, not for remittance.)

MESSRS. BLANK & BLANK, No. ....
Certified Public Accountants,
110 Broadway, New York.

The statement of our account with......................
as of..............19...showing a debit / credit balance of $........
is correct with the exceptions, if any, stated below.

Signed..................................

By............................

Exceptions: ....

....

....

(Use other side if necessary)

The following form, or some adaptation of it, will be found to meet all usual requirements.

> The foregoing (or following, or attached, or accompanying) statement of your account as shown by our books is mailed by Messrs. Blank & Blank, Certified Public Accountants, 110 Broadway, New York, who are now engaged in the periodical audit of our accounts. Please examine the statement at your earliest convenience and if any exception is noted please advise *the auditors* directly, at the above address, giving full particulars. Your co-operation in this matter will be appreciated.
>
> DOE & ROE

This form may be condensed, without sacrificing any absolutely essential feature, to meet the practical requirements of any situation, somewhat as follows:

> Please examine this statement at your earliest convenience and advise our auditors, Blank & Blank, Certified Public Accountants, 110 Broadway, New York, as to any exceptions noted.
>
> DOE & ROE

It is thought that the first form is better than the second, from the standpoint of both the client and the auditor.

Following up and reporting upon responses.—Upon receipt of the responses to requests for confirmation, such differences as are reported by the respondents should be investigated and the results recorded on the working schedule. If a charge not admitted by the debtor appears reasonably to represent a shipment in transit, or if a remittance or a return of goods claimed by the debtor is found to have been in transit and to have been subsequently recorded as received, the account should be treated as confirmed. Any credits claimed for returns, allowances, discounts, overcharges, or other offsets, should be brought to the attention of the client. Any difference which indicates the possible existence of fraud should be exhaustively investigated. The auditor should use

his judgment, in view of their practical importance, as to whether or not the differences disclosed should be adjusted in the preparation of the financial statements of his report.

The results of the procedure of confirmation should be covered in the comments of the audit report. The degree of detail presented will depend upon the method of confirmation, the number of accounts, and the relative importance of the disclosures. In the case of positive confirmation, where there are very many accounts it will usually suffice to report the percentage in number and amount actually confirmed, with particulars as to any especially important accounts (as indicated by their amounts or otherwise) not confirmed, and as to any material differences which have been disclosed. When the number of accounts is not so large it is usually desirable to go into greater detail regarding the balances not confirmed, unless the matter has been fully covered in informal discussion with the client's representatives. In the case of negative confirmation, it is necessary to state in the report that this method was adopted and to present the results in as much detail as seems appropriate, having regard to what has already been communicated to the client in the investigation and discussion of the differences disclosed.

Some mention should usually be made of any accounts for which confirmation requests were not sent out; as much detail should be given as seems appropriate regarding the items and reasons for not requesting confirmation. On account of the delay in receiving responses to the requests for confirmation, it is sometimes desirable to cover the subject in a supplemental report, to be rendered later than the regular audit report. If the requests are sent out promptly, however, there will be comparatively few occasions when this expedient needs to be adopted; and, when it is, there should always be included in the regular report an appropriate qualification with respect to the forthcoming supplemental report.

Accounts Receivable Assigned or Pledged.

Accounts receivable are frequently assigned or pledged as security for loans. Very often, perhaps in the majority of cases, this transaction takes the legal form of a sale of the

accounts, the transfer being evidenced by an assignment, in consideration for the amount received, or to be received, from the assignee. However, such sales usually are subject to guaranty by the seller of the collection of the accounts, and the buyer usually withholds about 20% of the total amount of the accounts sold as a guaranty fund until all, or a specified number, are collected. If an account proves to be uncollectible it is turned back to the assignor and either charged against the guaranty fund or another account is substituted for it.

Sometimes the debtors are notified of the assignment and instructed to remit to the assignee, but usually they are not so advised and remit in the regular way, whereupon the collections are turned over to the assignee. Sometimes the assignor deposits the customers' checks and issues his own check to the assignee, and sometimes the customers' checks are turned over directly to the assignee with a blank endorsement, so that there is no indication on the checks that they have been thus turned over. A commission or handling charge is paid to the financing institution for the use of the funds.

When remittance is to be made to the assignor the accounts are allowed to remain on his books, generally, however, with a rubber-stamp notation opposite each charge to the effect that the amount has been assigned (the assignee being named). In the rare cases where accounts are sold without recourse they are properly treated as collected and disappear from the books, but when an assignment or pledge of the accounts carries a guaranty as to collection they should remain on the books until collected. When accounts are simply pledged as security for a loan there is no question but that the amount of the loan should be credited to a liability account, but when the accounts are assigned there is some doubt as to the proper method of accounting for the amounts received and receivable from the financing institution. There are two general methods, which reflect two different conceptions of the actual character of the transaction.

To give effect to the legal form of the transaction, that is, that the accounts have been sold, the entries that should be made are stated in journal entry form as follows (assuming that 80% is advanced):

Cash—80%
For cash advanced by assignee
Accounts Receivable—Assignee—Guaranty
Account—20%
For amount withheld by assignee
To Accounts Receivable—
Assignee—100%
For customers' accounts assigned.

These two accounts with the assignee would be carried in the accounts-receivable ledger, the latter being a credit account to which remittances to the assignee would be charged. If all the accounts were thus assigned the accounts receivable would be shown in the balance sheet somewhat as follows:

Accounts receivable—assigned	100%
Less received from assignee..........	80%
Receivable from assignee	20%

This conforms to the legal conception of the transaction, which appears to be desirable in most cases.

The practical conception, however, is that in effect a loan has been made amounting to 80% of the accounts, and the accounts have been pledged as security therefor. To give effect to this conception in the books it would be necessary merely to carry the two accounts with the assignee, shown in the foregoing journal entry, separately in the general ledger instead of in the accounts-receivable ledger, which would make the controlling account for accounts receivable represent all the customers' accounts and nothing more. It appears to be desirable to have two accounts with the assignee, as otherwise there might be confusion regarding the amount of the guaranty fund that is receivable, but for balance sheet purposes the debit account should be deducted from the credit account to show the actual liability to the assignee.

This seems to the author a thoroughly practical and commonsense treatment of the matter, but he has encountered objections on the part of clients to its adoption in the preparation of balance sheets for the reason that it involves in-

creasing the liabilities by an amount which has been received in the legal form of payment for assets sold. Consequently, if an invariable rule is to be adopted it appears to be desirable to conform to the legal form of the transaction and reduce the accounts receivable by the amount received from the assignee.

The foregoing all relates to the treatment of assigned and pledged accounts in the balance sheet. It has not been mentioned specifically, but should be understood, that whenever accounts receivable, or any other assets, are assigned or pledged, that fact should be stated in the balance sheet. The only other special consideration in connection with the audit of assigned or pledged accounts is that a confirmation should be obtained from the assignee or pledgee as to the amount of outstanding balances of accounts, the amount advanced or loaned to the company, and the amount, if any, withheld.

Reserves.

It has been stated that provision for doubtful accounts should be made by charging income and crediting a reserve. Provision should be made also, in a similar manner, for any other known or probable deductions from the accounts, with the exception of strictly cash discounts (not to exceed, say, 2%), which may be regarded as a financial expense incurred in the period in which the remittance is made.

Specific allowances to be made at the time of settlement, which should be provided for, may be trade discounts, freight allowances, and allowances for containers. Under proper accounting procedure all these are considered at the time of billing, appropriate accounts being credited as reserves for the charges to be made at the time of settlement, and only the net amount being credited as sales, but very often such procedure is not followed. Information regarding these matters may be derived from inspection of the sales invoices and analysis of the charges to accounts representing deductions from sales.

In the case of magazine publishing houses, consideration should be given to allowances to be made for returned copies, as there are usually large deductions from sales on that account. Concerns doing a business of this character, including

any that make a practice of billing on approval, should keep their accounts in such a manner that the billings are held in suspense until the actual sales can be determined. If that is not done, and the accounts show relatively large returns, the auditor should see that an adequate reserve for returns is established, based upon the experience in that respect during past periods or the actual returns from the sales of the last month of the current period as shown by the subsequent records.

If the accounts show that inordinately large allowances have been made on account of defective goods sold, and it appears that there will be considerable deductions for that reason in settlement of the accounts outstanding, a reserve should be provided against such losses. In determining the amount of such a reserve full inquiry into all pertinent conditions will have to be made.

All reserves against accounts receivable should usually be deducted from the amount of the accounts in the balance sheet. There are times, however, where a reserve for doubtful accounts, which has been established upon the basis of a percentage of sales or by credits of round amounts without regard to actual requirements, may not be needed or may be largely excessive, in which case the excess over estimated requirements may properly be carried among the liabilities.

Miscellaneous Accounts Receivable.

Thus far the discussion has been almost confined to customers' accounts. The other classes of accounts receivable referred to in the introduction to this chapter, consisting of loans and advances to individuals and companies, and claims, present few special problems.

Accounts representing loans and advances to individuals (usually stockholders, officers, and employees) should be carefully scrutinized and, as a rule, should be confirmed by the debtors. The credit postings should be checked, to guard against improper credits. Careful consideration should be given to their probable collectibility. Such accounts should be shown separately in the balance sheet, either in total or individually as seems appropriate in the particular case. By this it is not meant that any indebtedness of an individual

connected with the business should be shown separately, as it is entirely proper to include with the customers' accounts any really current accounts representing sales to such individuals.

Accounts with affiliated companies may usually be verified by examination of their books or statements. Any balances due from such companies which do not represent recent sales for which settlement is made currently, should be shown separately in the balance sheet. Advances for permanent or working capital should not be classified as current assets but as investments.

Claims against transportation companies and the like should be investigated as to their validity and collectibility. The evidences of the claims filed should be examined, together with any correspondence relating thereto. It is easy to accumulate doubtful claims against carriers unless the claims are persistently followed up. Claims of any considerable amount should be shown separately in the balance sheet.

What has been said regarding the action to be taken by the auditor with respect to uncollectible and doubtful customers' accounts applies equally to all other accounts receivable. There is more likelihood of accounts representing loans or advances being secured than customers' accounts. Collateral security of whatever nature which is called for by the records or otherwise comes to the attention of the auditor should be accounted for and should be considered in connection with the collectibility of the account.

The miscellaneous accounts receivable should comprehend, in the auditing procedure and in the balance sheet, debit balances in accounts payable that do not represent advances on account of purchases and are not offset by credit balances for the same companies or individuals. Correspondingly, credit balances in accounts receivable that are not offset by related debit balances should be included in the accounts payable. As to the classification in the balance sheet, the foregoing is subject to the exception that when comparatively small amounts are involved, which would have no practical bearing upon the financial condition as shown in the balance sheet, the auditor would hardly be justified in changing the classification as shown in the client's published statement in that respect.

Accrued Income.

The word "accrued," in its technical significance, and as applied to income, is differentiated from "receivable" in that accrued income has been earned and accumulated, through the employment of capital or otherwise, for a certain period, but the point has not yet been reached when, in the ordinary course of business, the amount is receivable or is chargeable as a claim. This may be illustrated by the interest on a 6% mortgage for $1,000, due semi-annually. At each interest date, six months apart, there is interest receivable, a definite claim, of $30. For balance sheet purposes this is an account receivable unless collected promptly. At the end of each intermediate month, from the first to the fifth, there is an accumulation, or accrual, of interest of from $5 to $25 which has been earned but is not receivable until the end of the sixth month. If no record of this income is made until it is due, the accounts will show income of $30 from the mortgage in one month and nothing for the other five months.

For a going concern, the principal reason for considering accruals of income as assets—and, conversely, accruals of expenses as liabilities—is that the income for each period may thereby be properly stated and not be subject to undue fluctuations. Accruals are often not taken up in the accounts—for various reasons: the effect upon income may not be regarded as important enough to warrant the clerical labor involved in recording the accruals, the accounts may consistently be kept upon a cash basis, or accruals of income may not be considered for reasons of conservatism; on the other hand, the only reason for not recognizing accruals may be ignorance of the principles involved or carelessness.

When the client does not want to set up the accruals on the books, and the amounts would be comparatively small, the auditor should not undertake to make the computations and no mention of the matter need usually be made in the report. Even when the amounts of the accruals would be comparatively large, the accounts should seldom be adjusted; but a comment usually should be made in the report to the effect that accruals have not been considered, with pos-

sibly a statement regarding the approximate amounts of such accruals.

Income should never be accrued unless it is expected that it will be collected; however, in doubtful cases it may be desirable to accrue the income and set up a reserve for the same amount. When items are carried on the books as accrued receivables but are actually due, they should usually be classified in the balance sheet as miscellaneous accounts receivable, unless the amount of any particular item or class of items is comparatively large, when it may be appropriate to show it separately; as, for example, interest receivable or rents receivable. Such items may require close attention with respect to their probable collectibility.

Accrued income may consist of interest, rents, royalties, fees, or income from any other source with the exception of the sale of goods. The determination of such accruals is usually a comparatively simple matter in any event, but the mechanical procedure may frequently be facilitated by giving thought in advance to the possibility of combining various working schedules for that purpose. This matter is covered at considerable length in "Accountants' Working Papers," previously referred to.

Accrued interest receivable—as distinguished from payable—may be on notes, bonds, mortgages, loans or other open accounts receivable, certificates of deposit, savings bank deposits, and possibly on current bank accounts. It is rather unusual to accrue interest on the last mentioned, as where the interest allowed by banks on current balances is considerable it is usually credited by them monthly. The computation of accrued interest on notes, bonds, mortgages, and similar assets is most expeditiously done by use of the schedules prepared primarily in connection with the verification of principal. Any other interest-bearing assets should be noted and the accrued interest thereon computed, subject to the foregoing remarks as to the necessity of doing so.

If the accruals of interest, or of any other income, have been computed by the client's office force, as they usually are, the auditor should merely check them as to their approximate accuracy. When this is done, it may be practicable to dispense with showing any details of the accruals, or of certain of them, in the working papers. A valid criticism which has

repeatedly been made of the work of many auditors is that too much time is spent in figuring accruals, deferred charges, and the like, that might be devoted to more important matters.

Dividends on stocks owned should not usually be accrued. It is proper to set up as receivable (not accrued) the amount of a dividend which has been declared, but it is not conservative practice to accrue dividends on stocks in the same manner as interest is accrued on bonds, with the possible exception of a comparatively few very high-class preferred stocks and stocks of controlled companies when there is no doubt as to the available earnings.

The basis for the accrual of income such as rents, royalties, and fees, is derived from the examination of the related income accounts. In the case of rents, attention may be specifically directed to the income account by an asset account which shows an investment in property from which a return should be expected. No practicable rule can be laid down in connection with the determination of such miscellaneous accruals except the general rule obtaining in all complete audits that every source of income known to be available should be investigated with a view to accounting for all income receivable.

CHAPTER X

ASSET ACCOUNTS—Continued

Merchandise.

The word "merchandise" is used here in its broadest sense, as inclusive of all commodities which may be dealt in or used. The class of assets represented is somewhat loosely designated by business men, bankers, and accountants as inventories, but clarity of expression requires that the noun "inventory" be used only as denoting a list or record of quantities and values of merchandise determined to be on hand at a given time.

The general classes into which merchandise falls may be stated as follows:

For manufacturing or producing concerns:
- Finished goods, or finished product, or manufactured goods.
- Goods in process of manufacture, or partly finished goods, or work in progress.
- Materials, or raw materials.
- Supplies, or operating supplies.

For mercantile concerns:
- Trading stock, or merchandise.
- Supplies.

For all other concerns, institutions, and organizations:
- Supplies.

The class of concerns designated as manufacturing or producing would include any whose activities consist partly of manufacturing or of converting materials into another form by the application of labor. To take the automobile industry as an illustration, manufacturing would comprehend the operations not only of the factory but also of any separate assembly plant and of the service department of a dealer or

agency. It is not intended that the manufacturing group will include building contractors, as their operations are of a distinct type and will be considered separately, under the head of "Uncompleted Contracts."

The value of merchandise on hand is determined by means of an inventory of some kind. Inventories have two general features, quantitative and valuation; and are of two general classes, physical and book. Estimated inventories may be considered as constituting another class, but in order to be at all valid the estimates must represent reasonable approximations of physical inventories, and therefore they present no distinctive features.

A physical inventory involves determination of the quantities on hand by actual count, measurement, or weight, and specific valuation of each unit. A book inventory is usually, as its name implies, a record showing the quantities and values of the units of merchandise which presumably are on hand. Such a record is usually known as a perpetual inventory. It should be based upon a complete physical inventory taken within a reasonable time or be tested at frequent intervals by physical inventories of sections of the stock in rotation, so that the whole inventory will be proved at least once a year.

There may be another condition where the valuation of merchandise may be said to be represented by a book inventory; that is, where a physical inventory has been taken within a short time and a constructive inventory is arrived at by adjusting the physical inventory in total with respect to the cost of merchandise subsequently received and delivered or used. This expedient may properly be adopted in many cases.

Time of taking inventory.—It seems appropriate at this point to amplify somewhat the brief remarks made in chapter II regarding the auditor's opportunities for offering helpful advice to his clients on the general subject of inventories and related matters. When the business is in any way seasonal—and most businesses are—at least once each year merchandise stocks are relatively low. Some such time will mark the end of what has aptly been called the natural business year. Then the financial condition is likely to be most favorably displayed with regard to the liquidity of the working capital as denoted by the ratio of current assets to current liabilities. Moreover, at that time physical inventories can most easily be taken,

not only because they are lowest, but also on account of the greater availability of the personnel to engage in the work.

It is thus evident that there are many advantages to be derived from the adoption of the natural business year of a concern as its fiscal year. The prevalent notion that the fiscal year should coincide with the calendar year has in perhaps most cases no basis in logic. There is not even the reason for it that many believe there is; namely, difficulty with respect to Federal income tax returns. Taxpayers are permitted to make returns for any fiscal year they may adopt, upon observance of a very simple formality in giving notice of intention to do so. The only possible difficulty in this respect arises in connection with a change of tax rates, effective at the beginning of a calendar year, but even this now presents no considerable problem as definite rules of procedure have been promulgated by the Treasury Department. Furthermore, the desirability of keeping accounts so that the results of operations may be known monthly, based upon perpetual inventory records, is being increasingly recognized, so that a concern may if desired continue to make its tax return for the calendar year even though it may have a different fiscal year.

This matter of the adoption of the natural business year is a very serious one for professional accountants, and they will be serving their own interests as well as those of their clients by advocating a change of fiscal year from the calendar year whenever they can conscientiously do so. Clients naturally want their accounts audited soon after the end of their fiscal year, and when that date for the great majority of concerns falls on December 31st the greater part of an auditor's work must be done in the first three or four months of the year. This necessitates the recruiting of auditing staffs during that period largely upon a temporary basis, and the overworking of principals and permanent staffs, with a consequent deleterious effect upon the quality of work performed. This is harmful to the individual practitioner and the profession at large, as well as to the business interests served.

The principal remedy for this condition is, as stated, inducing clients, whenever appropriate, to adopt a fiscal year different from the calendar year. Another partial remedy is to do as much preliminary work on an audit as possible be-

fore the end of the year. This, however, cannot always be done as, under the American practice, an auditor is often not retained until after the end of the year.

Perpetual inventory records.—Another matter in connection with inventories may furnish an opportunity for the auditor to offer constructive advice to his client; namely, the keeping of perpetual inventory records. This is a subject that cannot be considered lightly, as the practical desirability of maintaining such records is by no means general, but a great many concerns are waiting six months or a year for the taking of a physical inventory to determine the results of their operations when, with comparatively little expense, they might install perpetual inventory records and thus be enabled to know their condition at the end of each month or oftener.

Among the matters to be considered in deciding upon the advisability of installing a perpetual inventory system, as with most refinements of accounting, are the nature of the business, its size, whether or not it is prosperous, the character of the office personnel, and the inclination of the executives to utilize the results to be obtained. Generally speaking, a perpetual inventory system, as part of a cost system, is essential for a manufacturing concern; but it is not usually appropriate for a mercantile concern, especially a retail store.

The discussion will now turn to the verification of inventories.

Physical Inventories.

Quantities and values are distinctly separate factors to be considered in the verification of physical inventories. These factors will be discussed in turn.

Quantities.—The verification of the quantitative feature of inventories is not generally regarded as comprehended in the scope of an audit. The basis for this common understanding appears to be the notion that professional auditors are not qualified or equipped to do that kind of work. In many, if not most, cases this belief is utterly fallacious. It is admitted that, as to some businesses, an auditor, in common with almost all other outsiders, cannot have the same knowledge of the merchandise as have those actively engaged in the business, and therefore is seldom qualified to take an inventory independently of the persons familiar with the stocks; but there is a

distinct difference between such independent action and the procedure necessary to enable the auditor to satisfy himself regarding the quantities so that he may certify to the inventories without reservation.

Merchandise is undoubtedly the most uncertain element of the balance sheet of a commercial concern, as it is the most likely to be misrepresented, wilfully or otherwise; and it seems that the general rule regarding an auditor's assuming responsibility for all features of an inventory should be completely reversed. The public should be warranted in assuming that an auditor's certificate implies unlimited verification of the inventories unless specifically qualified in that respect, whereas at present there is the contrary implication that the verification of inventories extends no farther than values unless otherwise stated.

Tests of quantities.—In order to be in a position to certify to the quantitative feature of an inventory it is necessary only that the auditor supervise the counting, weighing, or measuring of a considerable part of the stock as represented in the values. Unless it is desired, for some special reason, that the auditor verify each item of the inventory, it is sufficient for practical purposes to test the quantities by inspection of the larger items and to be assured that the inventory as a whole is being carefully taken and vouched for by responsible persons.

To be thoroughly effective, the process of verification of quantities must include some method of control over the inventory sheets, so that it will be known that no change has been made in the quantities as recorded before the final computation of values. The practicable procedure in this respect depends upon the conditions in the particular case, but the auditor should fully recognize that he is not warranted in taking anything for granted in such a situation any more than he is in the auditing of cash. If the inventory sheets are to be turned over to the office staff for pricing, as is usually done, they may be made in duplicate, the auditor retaining the copy and comparing it later with the original as to the larger items; or the auditor may list the important items on a separate sheet, to be retained in his papers for comparison; or any other practical expedient may be adopted.

It may be possible to make adequate tests of quantities con-

siderably after the inventory has been taken and recorded, especially if perpetual inventory records are maintained. It is necessary only to inspect the stock on hand at the time of the audit and reconcile the quantities so determined with those shown in the inventory with respect to interim receipts and issues.

Warehouse certificates.—Whether or not the quantities on hand are to be systematically verified, if a considerable part of the merchandise is stored in a public warehouse the ownership thereof should be verified by inspection of the warehouse certificates, unless the audit is made at such a late date that it is impracticable to do so. If warehouse certificates are pledged as collateral to loans, their existence will, of course, be confirmed by the pledgee in connection with the confirmation of the indebtedness. The fact that merchandise is pledged, and the valuation of such merchandise, should be stated in the balance sheet; this applies also to merchandise held under trust receipts issued by banks which have advanced funds to finance the payment of drafts accompanied by bills of lading for the goods.

Warehouse certificates must usually, if not always, be surrendered upon delivery of the merchandise, and they are accordingly acceptable by banks as collateral without supporting evidence of the ownership of the goods. It seems, therefore, that the auditor need not usually require corroboration of their validity in the form of confirmation by the issuing warehouse. The author has known of cases, however, where request for confirmation of the total quantity of merchandise held as shown by certificates on hand has disclosed loose practices with regard to delivery of the goods without surrender of the certificates.

Confirmation of quantities by constructive inventory.—Where physical verification of quantities is not desired by the client or is impracticable, it is often possible to confirm the quantities shown in the inventory as being those which should be on hand. While this is not conclusive evidence of the propriety of the inventory it has some value in that respect, as it demonstrates that the inventory is not understated, and has great value in connection with a complete audit in proving that all the merchandise is properly accounted for.

Means of confirmation of quantities may be furnished by an

existing perpetual inventory record or may in some cases be constructed from the records of purchases and sales. This latter would apply only to businesses where large units of merchandise, of little or no variety, are dealt in. For example, a constructive inventory for a dealer in raw cotton may be computed with comparatively little effort by tabulating the number of bales on hand at the beginning and the number purchased and sold during the period, thus showing the number which should be on hand at the end; the same would apply to any such units as bushels of grain, barrels of oil, and number of machines of a certain type. Agreement of a physical inventory with an existing book inventory is one of the best possible evidences of the propriety of the accounts as a whole, provided there is no irregularity in the entries in the perpetual inventory account.

Merchandise which is not to be included in inventory.—Whether or not the auditor is to undertake the verification of quantities, he should determine as far as possible that the inventory does not include merchandise which is on hand but is not owned; or which has not been, or should not be, taken into the accounts; or which is known to be unfit for sale or use.

Merchandise held but not owned usually represents consignments, but it may be held by the concern as bailee for safe-keeping or for repairs, or any such purpose. As to consignments, there is usually some record in the accounts whereby the auditor is put on notice that the goods should be accounted for in addition to the inventory of goods owned; but there may be no indication that goods are held for other purposes unless it is known that goods are sometimes taken for storage or repairs or there is some reason to believe that goods billed to customers have not all been shipped. The auditor should always make inquiries along these lines, and if there is any doubt should make an exhaustive investigation.

It is customary in some seasonal lines of business, notably the wholesale dry goods business, for manufacturers or dealers to make shipments of one season's goods before the end of the preceding season, and, as an inducement to the acceptance of such early deliveries, to post-date the invoices to accord with the time when the goods are really wanted by the customers. It is a fairly well established custom under such conditions

for the receiver of the merchandise not to take it into his accounts until the beginning of the season for which it was purchased, that is, after the inventory. The auditor should not only determine that such merchandise is not included in the inventory but also that it is in fact on hand. Instances have been known where some of such merchandise has been sold before the inventory date without any liability therefor having been taken up in the accounts. Whenever the value of goods on hand and the liability therefor are excluded from the balance sheet, the fact should be mentioned in a foot-note.

Inventory methods.—The auditor should always inquire into the methods employed in taking the inventory to see that proper care has been exercised in the counting, weighing, or measuring of units and the tabulation of the results. There is probably no such thing as an absolutely accurate inventory of a business of any magnitude, but the inaccuracies can be reduced to a minimum by the employment of proper methods. The principal difficulty in most cases is that it is impossible to discontinue operations entirely during the taking of the inventory, so that part of the work must be done before, and part after, the inventory date, thus necessitating adjustments up to the time of completion.

Many good inventory methods have been evolved to meet the requirements of varied conditions. It is impracticable to discuss such methods at great length here, as it would involve consideration of minute details of organization and operating conditions. The installation of an inventory system for any concern should be preceded by an extensive study of its individual problems. It may be said in general, however, that for an inventory of any size, numbered cards should be prepared in advance to show the following: full description; unit (such as piece, pound, foot); number of units on hand; date of count, and any other appropriate means of identifying the last receipt or issue prior to count; names of persons making and checking count; and details of adjustments to be made for changes before or after counting. One of these cards would be used for each piece of goods, bin, or other similar unit or division. Then they would be taken up, the numbers accounted for, and tabulated on sheets or otherwise.

If some such system as this is followed, and especially if the count is checked in an effective manner by someone who

is not directly interested in the result, a fairly accurate inventory is likely to be obtained. If the physical inventory is checked by disinterested persons and agrees substantially with a book inventory it may be assumed to be as nearly correct as possible. If, on the other hand, it is found that the methods employed have not been such as to produce reliable results, the auditor should take such steps as seem appropriate in the particular case, having regard to the gravity of the situation in all respects. He may insist upon an adjustment being made or even upon a new inventory being taken, or may insert a qualification in his report—in a more or less conspicuous place. The same principle applies to specific differences disclosed; that is, their treatment should be determined by their relative importance.

In view of what has been said regarding the inquiry into inventory methods, it seems hardly necessary to state that the auditor should always satisfy himself as to the genuineness of the inventory submitted to him for examination and should always see all supporting data. There have been many cases where inventories have been rewritten or altered. The auditor should be on the alert to recognize any indication of such manipulation.

Valuations.—However opinions may differ as to the necessity for verification of inventory quantities by an auditor, or his fitness for that work, there can be no doubt that the verification of inventory valuations is generally regarded as comprehended in the scope of an audit, and that it is an indispensable part of an audit; neither is there any doubt that the professional auditor should be eminently qualified to pass upon such valuations.

The verification of valuations seldom requires that all prices be investigated, but tests should usually be made covering at least one-quarter to one-third of the total amount of the inventory. All the very large items should be examined, and sufficient tests made of the smaller ones to permit of forming an opinion regarding the propriety of the pricing generally.

The guiding principle in the valuation of merchandise, as of every other asset, should be reasonable conservatism. This means, in the first place, that no profit should be taken in advance of the disposal of merchandise by valuing it in excess of cost. Up to this point, there is no disagreement among

those who would constitute themselves authorities on the subject; but there is considerable disagreement when it comes to establishing a rule of valuation when the market for similar goods, or for the basic materials and labor, has declined to the point where the goods could be replaced for less than they cost or could not even be sold at cost.

This is by no means merely an academic question. During the years 1919 to 1921 business in this country had a rude awakening to the possibilities and disastrous results of rapidly declining markets. This development was to be expected in view of the cessation of war activities and the inflation of values in the war years immediately preceding, but comparatively few businesses were so conducted as to be prepared to meet it. At the time this is written the general trend of prices is again upward, but the inevitable movement of business cycles will operate to bring them down again to some extent sooner or later. Under normal conditions, however, price movements are gradual, so that declines are not so calamitous as they were after the war.

The generally recognized principle of valuation of merchandise, which may safely be followed, is "cost or market, whichever is lower." This means valuing each item of an inventory upon that basis and using the total of such lower individual valuations, not taking the lower of two totals at cost and at market. The United States Treasury Department, in determining income for tax purposes, permits valuation of merchandise either consistently upon this basis or at cost. The only difficulty, then, is in defining "cost" and "market."

Cost.—For trading stock of a mercantile concern, raw materials of a manufacturing concern, and supplies of all concerns—in other words, all merchandise except the finished and partly finished product of a factory—cost is the amount paid therefor, including transportation and any other expense incurred directly in purchasing the merchandise and having it set down in the place where it is needed, such as duty, marine insurance, and weighing and inspection charges. It is proper to include the expenses of the purchasing and receiving departments but it is comparatively seldom done.

The amount paid for the merchandise will sometimes properly include losses on foreign exchange and losses on futures

purchased as protection against a rise in the market; and may, conversely, be reduced by profits on such transactions. Cost of merchandise which improves with age may properly include carrying and treating charges, such as storage, insurance, and drying expenses.

Goods in process.—The cost of goods in process of manufacture is the amount expended on the goods in their present state of completion, consisting of materials, direct labor, and factory expenses. When there is a cost system the inventory of goods in process is usually a book inventory, represented by the cost records. Such an inventory may be accepted as correct if examination indicates that the charges are current and that the system of determining costs is proper, as discussed below.

Finished goods.—The cost of finished goods is the aggregate cost of materials, direct labor, and factory expenses incurred in manufacturing them. Such amounts may be detailed costs, compiled by means of cost records, or specification costs, representing estimates based upon past experience, time studies, and other information. The detail records from which the costs are computed may or may not be correlated with the general accounts. The items included in overhead expenses, and the method of distribution thereof over the products, may or may not be logical. Every auditor should have a good working knowledge of the principles and practices of cost accounting, and the subject will not be considered at length here.

All available cost records and other data supporting the valuations of finished goods should be closely examined, and if possible the elements of computed costs should be compared with the corresponding general accounts. The consumption of materials reflected in the cost of production should be tested by comparison with that shown by the application of a physical inventory of materials; the charges to costs for direct labor should agree with the expenditures therefor shown by the general accounts; and the overhead distributed to costs should be in approximate agreement with the aggregate shown by the corresponding general accounts. Overhead expenses included in cost should be only those which may be regarded as directly related to manufacturing.

If the computed costs used for inventory purposes have not been applied during the period in costing the production and sales, it will probably be impracticable to make any such tests as suggested above, unless the product is uniform and production statistics are readily available. In any event, specification costs should be comprehensively tested with respect to the three elements of material, labor, and overhead—as to both quantities and values. The approximate percentage of overhead to be applied to either direct labor or material is almost always indicated by the general accounts.

Regardless of the method of computing costs for inventory purposes, consideration should be given to the resultant cost of goods sold in its relation to the sales. This involves inquiry into the percentage of gross profit realized in the past, the expected gross profit for the period, and any unusual conditions which might affect the result, such as increased or decreased volume of production, a rising or falling purchase or sale market, disturbed labor or transportation conditions, or inadequate physical control over the goods whereby there is unusual opportunity for and probability of considerable loss through theft. In the absence of abnormal factors of considerable influence upon the result, the percentage of gross profit may be expected to be approximately uniform from year to year.

If a marked variation is indicated, which cannot be reasonably explained by one or more of the disturbing influences cited above, there is good reason to believe that the inventory of finished goods is incorrect—either at the end or the beginning of the period. Unless the auditor has verified the next preceding inventory he should proceed to examine it along the broad lines of its general accuracy and should investigate the effect of its application upon the results of operations for the period ended that date. It may be found that any disproportion in the operating results for the current period is traceable to overstatement or understatement of the inventory at the beginning rather than at the end. If such inquiries and studies do not furnish a reasonable explanation for disproportion in the gross profit, and it still appears that the inventory at the end is considerably overstated or understated, the examination into details should be extended; and if nothing is developed thereby the subject should be fully covered in the

audit report, giving as much prominence to it as seems appropriate.

Latest cost or average cost.—Thus far, "cost" has been discussed as a more or less abstract concept. In its practical application, however, it may be either latest cost or average cost. This applies directly to all inventories except goods in process of manufacture, and even these do not constitute exceptions, as the elements of material and overhead are subject to variations in method.

It is virtually impossible to consider the relative merits of these two methods of applying cost without introducing the subject of market value. A decision in favor of one method or another on purely theoretical grounds would be influenced by the trend of the market and would favor latest cost when prices are falling and average cost when they are rising. It is desirable, however, especially for a manufacturing concern, that one method of costing be employed consistently in the operating accounts, even though the inventory may later be revalued in accordance with market conditions. It makes little difference which of these methods is adopted except that the use of averages tends to lessen the fluctuations in individual costs of production or sales and is perhaps a more practical method of keeping perpetual inventory records. There can be no rule in this respect which is applicable to all cases, as while for one concern it may be logical to employ the average basis for both materials and finished goods, for another the true conditions may be better expressed by the use of that method as to materials only or not at all.

If the inventories are to be taken consistently at cost, that is, if it is not necessary to revalue them to accord with market conditions, it seems that either latest cost or average cost should be acceptable to the auditor. There may be cases, however, where large quantities have been purchased for different specific orders or contracts, and at different prices, when it would be desirable to use latest costs or perhaps specific costs of lots of the same kind of material.

As to materials and supplies and the trading stock of a mercantile concern, when the goods are valued at latest cost the prices should be verified by direct reference to recent purchase invoices. When they are valued at average cost, some kind of stock record will be kept showing the purchases and

the computation of the average. The inventory prices should be tested by reference to that record, which in turn should be tested by comparison of the accumulated averages with the recent purchase prices as shown and by occasional references to the invoices themselves.

As to finished product, the distinction between latest and average cost has no important bearing upon the method of verification as outlined earlier in this chapter. If cost records are kept the difference will be only a matter of detail as to whether units sold are credited to the stock account and charged to cost of goods sold at their specific cost or at an accumulated cost figure. The examination of the cost records should include comparison of the average costs used in the inventory with the recent costs, to see that no serious clerical errors have been made. If cost records are not maintained, and the prices represent estimates of one kind or another, they may almost as well be based upon average conditions as upon those existing at a certain date.

Percentage of selling price.—What may be construed as average cost, by some exercise of the imagination, is the valuation at a percentage of the selling price. This is often done in the case of manufactured goods and sometimes for trading stock. The practice can seldom be justified except as a rough and ready expedient to be adopted when no more reliable basis is available. However, it is entirely proper in the case of an agency or branch when the goods are billed to it at selling price less a discount; in such a case the result would be actual cost. The result of the practice may not be far amiss in the case of a mercantile concern if it is used judiciously and some exceptions are made for merchandise priced at other than the established rate of gross profit.

When finished goods are valued at percentages of selling prices there are several matters that should be inquired into. It should be ascertained, first, that the average margin for profit allowed in the inventory values is supported by the gross profit realized from sales during the period computed upon that basis. This would be a general indication of the propriety of the valuation, especially if the inventory at the end of the period is less than that at the beginning. If, however, the inventory at the end is more than that at the beginning, thus contributing materially to the showing of

gross profit, or if it is a considerable amount, regardless of the inventory at the beginning, it is desirable to extend the investigation.

Fairly detailed comparisons should be made of the operations of the current period with the one next preceding, with respect to the sales; the various elements of cost and their relation to sales; and the gross profits, and their relation to sales. This will indicate whether or not the operations have been approximately normal in the current period so as to justify the expectation that the rate of gross profit deducted from selling prices for inventory purposes will be realized from the goods on hand.

Obsolete goods, scrap, etc.—A system of valuation at cost does not imply that everything should be thus valued, regardless of its condition. Obsolete, shop-worn, or otherwise defective materials or merchandise, and scrap, should always be carried at their realizable values, if any. The auditor should investigate to see that this is done.

Residuals and by-products will also be inventoried at their sale value, for the reason that it is impossible to assign any definite cost to them.

Intercompany or interbranch profits.—When goods are sold or transferred to an affiliated company or branch at a profit, in the audit of the group of companies or branches the amount of gross profit to the shipper must be eliminated from the cost of the goods thus sold or transferred which are inventoried as on hand at the end of the period. This is done only in the consolidation of the accounts of the group. If the shipper operated at a loss it does not follow that the value of the goods should be increased.

Market value.—In most cases market value should be taken to mean the amount which would have to be paid to replace the merchandise at the time, or in other words, current cost. This is usually different from the amount for which the merchandise would be sold by the concern in the ordinary course of business.

Over a long period, the sale value of every commodity and service, with the single exception of gold, the value of which is established by law, is determined by cost. Unless increased cost is accompanied by increased demand or by a general rise in the price level due to a decline in the value of the dollar,

so that the sale price advances in proportion to the increase in cost, production will be curtailed until the demand increases or the cost decreases. On the other hand, if the demand for a commodity, other than a patented article, increases so that its sale value rises without a corresponding advance in cost, the production of the commodity will be increased until it meets or exceeds the demand or the cost increases, and the normal relation of sale value to cost will be restored.

It should not be reasoned from these premises, however, that it is proper to continue to value goods at actual cost when the sale value has declined. There are two outstanding reasons for not doing so: the value of the dollar, which is the measure of prices, is so unstable that current costs as expressed in dollars fluctuate; and even if this were not so there would be no assurance that the goods could be or would be held until the economic adjustment with respect to supply and demand had taken place whereby the sale value of the goods would again bear its normal relation to the actual cost.

Merchandise purchased.—The market value of trading stock of a mercantile concern, of raw materials of a manufacturing concern, and of all supplies, is the price for which the goods could be replaced if bought in the usual quantities. This may mean the producer's price or the wholesaler's price, or even the retail price, in the case of supplies, depending upon the character and size of the business. It would obviously be incorrect, for example, to value flour in the inventory of a small retail grocery at the published quotation of the millers for carload lots.

The best evidence of market value of merchandise purchased, as distinguished from that produced, is usually the price at which a very recent purchase has been made. If most of the merchandise has been purchased recently there is, therefore, virtually no difference between valuation at market and at latest cost. For practical purposes, goods purchased not so recently may be regarded as worth cost, even though in excess of present market, if they were purchased specifically on account of a profitable sale contract. In periods of declining prices, however, such a situation should be given serious consideration because of the danger of the buyer repudiating the contract.

Open purchase orders of very recent date may be accepted

as evidence of current market values of the classes of goods on order, but old purchase contracts may not. Such old contracts may have been entered into at prices considerably in excess of those prevailing at present, and it may be necessary not only to reduce the values of the goods already received on the contracts, and on hand, but to set up a reserve for losses on purchase commitments to provide for the excess of contractual cost over market value of goods still to be received.

In the absence of current purchases and purchase orders, recourse must be had to quotations from the suppliers of commodities or to published quotations. Such published prices may not be thoughtlessly accepted, even when appropriate to the size of the business, especially as a basis for valuation of large stocks. The conditions in the wholesale commodity markets are similar to those in the stock market. The recorded sales prices or quotations often apply to comparatively small quantities and are subject to reductions in a bear or buyer's market—when a large quantity is offered for sale; and to increases in a bull or seller's market—when a large quantity is sought for purchase.

It will be seen that the auditor must exercise good judgment in the determination of what constitutes fair market value. He must often oppose the optimistic tendencies of his clients but he should never fail to consider any conditions which may have a bearing upon actual values; nor should he ever subordinate the practical aspects of a situation to the literal observance of general principles of valuation. This applies not only to methods of determining market values but also to the necessity of valuation upon that basis rather than at cost.

Manufactured goods.—The market value of manufactured goods is what it would cost to reproduce them, based upon the present prices of material, labor, and the various elements of factory expenses. There is, of course, a market value for the sale of such goods, and one of the moot questions is whether in fact that is not the value that should be used.

The United States Treasury Department takes the view, which appears to the author to be sound for general application, that replacement or reproduction cost rather than sale value is the logical basis of valuation of merchandise when cost is not a proper measure of present values. Of course

there are times when proper conservatism dictates that losses already sustained through a decline in selling value below replacement cost should be recognized; but in the author's opinion this should not be done in abnormal times of temporary depression, as it almost invariably works an unnecessary hardship on the business and does not necessarily result in expressing the true conditions. It should be done, however, when a decreasing volume of sales indicates permanent cessation of the demand for the product, which may be due to obsolescence, discontinuance of advertising, or some other cause.

Product should always be valued at what it can be sold for if a business is still in an experimental state and has not yet reached the point of successful production or where for some other reason a profitable market for the goods has not been established. It will be noted that these principles of valuation are precisely those obtaining with respect to obsolete and defective goods and scrap, and do not affect the major principle that goods cannot continue to be worth less than the current cost of production.

Selling prices, as such, should not be used for inventory purposes when the cost of reproduction is lower. If a decline in the sales market is thought to be only temporary, owing to abnormal conditions, and the accompanying decline in the apparent cost of reproduction appears to be artificial, that is, not truly expressive of conditions in the industry, it may be justifiable to continue to carry the product at actual cost, which may, in fact, represent approximately the selling price. This is, however, a dangerous practice, as it involves too much assumption. The safer practice is to value the product at reproduction cost and then take whatever profit there may be when it is sold. It need hardly be said that selling price should never be used when the actual cost is lower.

Agricultural and mineral products.—The sale value of a manufactured article at any time has a fairly direct relation to the current cost of production. This is not necessarily so, however, in the case of agricultural and mineral products. While such products are subject to the general principle that in the long run sale value must compensate for cost, there is never as close a relation between their cost and sale value as there is for manufactured goods. There are two general reasons for this: agricultural and mineral products are subject to

peculiar economic influences upon market values, principally with respect to the comparative inability to control the volume of their production and the fact that many of them are vital necessities; and the cost of such products is usually indefinite and not readily determinable.

The only practical basis of valuation for most agricultural and mineral products, in the hands of the producers, is sale value. This would usually apply to live-stock for sale, cotton, sugar, vegetable and mineral oils, grains, and metals. Coal and lumber companies are usually able to compute costs and the markets for their products are more subject to control than those of perhaps most other natural products.

In considering the proper valuation for any agricultural or mineral product the auditor should inquire into all phases of the situation and adopt the basis which seems most closely to express the actual conditions. Sale values should be used as a basis if they are less than cost. Allowance should always be made for any expense to be incurred for delivery or other handling charges before the market price can be realized. If a profit would be indicated by valuing at net market price it is desirable to reduce the valuation so as to defer the taking of the profit until realization through the sale of the goods.

Dealers in cotton, grain, etc.—In the case of dealers in commodities for which there are futures markets, such as cotton and grain, it is customary to value stock on hand at market prices prevailing at the date of the inventory. When this is done it is necessary also to compute the long and short position on open trades, or commitments, both spot and futures, upon the basis of market prices. The resultant profit or loss is usually taken up on the books, which has the effect of reducing the whole business to a liquidation basis. The practice, it seems, is not subject to serious criticism provided sufficient reserve is left in the business, in the form of surplus or otherwise, as protection against a decline in the market when there is a net long position—as there should be—or a rise in the market when there is a net short position, and provided further that the facts are clearly understood by all concerned.

Adjustment of accounts.—Whether or not an inventory is adjusted to market, it is desirable that the valuation be computed at cost and the cost of goods sold be stated accordingly. Any reduction of the inventory to market value should be

charged on the books separately and so shown in the income statement.

If provision is made for the difference between cost and market in a reserve rather than by reduction of the inventory itself, the reserve should be deducted from the asset account in the preparation of the balance sheet. This would apply to any reserve against overstatement of quantities or values if it appeared that there was real need for such provision. A general reserve for contingencies, carried for no specific purpose other than conservatism, should be carried on the liability side of the balance sheet.

The normal stock method of valuation.—Thus far, cost and market have been considered as the only proper methods of valuation of merchandise. There is, however, another method of valuing some stocks, or parts of stocks, which is advocated and has been used very successfully by a few large corporations engaged in manufacturing and smelting operations, in most cases where the product is in process a comparatively long time. It is described as the normal stock or minimum stock method. This method is based upon the principle that certain quantities of materials, supplies, partly processed goods, and finished product (or perhaps only some of these classes) are as essential to the operation of the business as the plant, and cannot be disposed of without discontinuing operations, at least temporarily. Accordingly, it is maintained that such normal stocks, not being subject to sale, should be governed by the principles of valuation of plant assets rather than merchandise, and should not fluctuate in value from year to year in accordance with variations in the market but be carried at their original cost or less; the remainder of the stocks, in excess of minimum requirements, being valued at current cost or market.

This method is to be commended for its conservatism, and its adoption has saved some concerns from inflation of their profits during the last few years. However, it has not been recognized as permissible for income tax purposes and is obviously subject to misuse in its application, especially in affording means of concealing profits from uninformed minority interests. An auditor should be cautious, therefore, about recommending it.

Book Inventories.

An inventory may be a book inventory as to quantities only or as to both quantities and values. With respect to quantities, a book inventory may be as reliable as a physical inventory, or even more so. With respect to values, a perpetual inventory which forms an integral part of the general accounting scheme, and which is tested from time to time as to quantities and adjusted for any differences, is usually found to be reliable as representing the cost of the merchandise on hand. If it seems necessary to value the merchandise at market, in order that the lower of cost or market may be used, the book inventory as to quantities may be utilized as a basis. If the book inventory does not show values it will merely be used in lieu of physical count of the stock.

As previously stated, the term "book inventory" is sometimes employed in the sense of a book value for the merchandise at the date of the balance sheet based upon a physical inventory taken and recorded previously. This may be acceptable to an auditor in some businesses, subject to the verification of the physical inventory in the usual manner, provided too long a time has not elapsed since the physical inventory was taken—usually not more than two or three months, and sometimes less—and there are fairly complete records of interim receipts and issues of merchandise.

Quantities.—A perpetual inventory record which shows values as well as quantities, and which is treated as subsidiary to the general books and kept in agreement therewith, is usually much more reliable as evidence of quantities, without regard to values, than one which is merely a memorandum of quantities and is not subject to accounting control. Regardless of this feature, however, a perpetual inventory record is not acceptable as evidence of quantities—nor, of course, of values, which are dependent upon quantities—unless there appears to be reasonably effective physical control over the stock and frequent tests are made to prove the accuracy of the record.

Before accepting a book inventory as to quantities the auditor should personally inspect the physical conditions under which the stock is kept and satisfy himself, as well as can reasonably be expected, that no merchandise is taken from the stock room without proper record being made. He should

also satisfy himself that partial physical inventories are being taken periodically and the record adjusted accordingly. The best evidence of this is to be found in the adjustments actually made during the year. It is probably a safe assertion that there never has been a perpetual inventory that did not require adjustment.

A perpetual inventory record should be verified completely at least once a year, either by systematic physical inventories of parts of the stock in rotation or all at one time. Under ordinary conditions an auditor would not be justified in accepting a book inventory which was not being verified currently, unless it was based upon a complete physical inventory taken not more than two or three months previously.

As has been stated in connection with physical inventories, the auditor may himself test the quantities by physical inspection of those shown by the record as on hand at the time of the examination. He may also deem it necessary to make some tests of the detail inventory records by comparing entries of receipts with purchase invoices and those of issues with the record of sales or of charges to the cost accounts. The procedure with respect to the verification of warehouse certificates would be the same as in the case of physical inventories, previously described (page 154).

Values.—When book inventory quantities are accepted, under the conditions outlined in the foregoing, and they are accompanied by values, the values will usually also be accepted, subject to some degree of verification. If the system of determining values constitutes merely a set of memoranda without attempt at correlation with the general accounts, it will be necessary to verify the values in the same manner as would be done in the verification of physical inventories at cost, which has already been discussed.

When the perpetual inventory record is, as it should be, subsidiary to the general ledger, the determination of the propriety of the valuation of the several items involves only the establishment of agreement between the details and the balances of the respective ledger accounts—materials and supplies, goods in process, or finished goods. In a balance sheet audit it might be desirable, however, to test the costs shown by the detail records by comparison with purchase invoices and the like; and in a complete audit the general ledger accounts

would be examined. In any event, in the case of goods in process and finished goods, the cost system should be investigated, as previously discussed.

Supplies.

The word "supplies" is employed here in its generally recognized technical sense as denoting the commodities which are used in the operations of a business but which are not sold specifically and are not ingredients of a manufactured product. Such commodities may be fuel, oil, waste, stationery, advertising matter, wrapping and shipping supplies, repair materials, gasoline for automobiles, feed and bedding for horses, and perhaps others.

Postage and revenue stamps are usually regarded as comprehended in supplies, although they are not literally commodities at all but documentary evidences of advance payments to the Government for postal facilities or taxes. Such stamps are frequently carried as cash, but the logic of that classification is rather obscure. They are no more liquid an asset for balance sheet purposes than coal in the boiler room, because, although the stamps may usually be sold with less difficulty than coal, there is no intention of selling either of them; further, they are both in the same class in the respect that if they were not on hand it would be necessary to part with cash to purchase them. However, there should be no practical objection to including a comparatively small amount of stamps in the cash in order to agree with the client's classification of assets. The only remaining alternative to including stamps with operating supplies in the balance sheet is to show them as a separate item, and this would be done only if the amount were considerable. As stamps are good subjects for petty thievery, if any considerable amount is carried on hand, and the amount that should be on hand is shown by the records, they should be counted by the auditor.

Containers—boxes, barrels, cartons, bottles, cans, and the like—may be supplies or materials. As a rule they are materials for a manufacturer, being virtually part of the goods produced, as essential for practical purposes as any of the ingredient materials; but are shipping supplies for a mercantile concern unless it changes the containers—for example, pur-

chases oil in barrels and sells it in bottles. In some cases containers carried by a retail store may be stock in trade; for example, fancy jewelry boxes. This matter of classification may appear to be trivial; in fact, in the author's opinion, it is of no importance whatever, but some reputable accountants make it appear so by insisting that operating supplies are properly shown in a balance sheet as deferred charges while materials entering into the product are current assets. The author can see no practical distinction between the two classes of commodities, and believes that they are all current assets.

The values of stationery and other supplies on hand are frequently estimated. Such estimates can usually be accepted by the auditor without question unless they appear to be entirely disproportionate to the amounts expended for the respective purposes. If there is any doubt as to their reasonable accuracy, but no conclusive evidence that they are grossly excessive, the auditor may adequately protect himself by indicating in the balance sheet, parenthetically, that the inventory is as estimated by the client.

Merchandise in Transit.

There is some difference of opinion regarding the necessity of setting up in the accounts the asset of merchandise in transit and the liability therefor. Theoretically it should be done in most cases, as, legally, title passes to the consignee when the goods are delivered by the consignor to a common carrier, unless the goods are sold f. o. b. point of destination. This is subject, however, to the law that the shipper can stop the goods while in transit, at any time before delivery to the purchaser, if he has any reason to doubt the ability of the purchaser to pay for the goods.

Aside from these theoretical aspects, with which business is seldom concerned except when it is necessary to make a claim against the transportation company, as a practical matter the purchaser can refuse to accept and pay for the goods if they are not as ordered. In the ordinary conduct of business, of course, goods are usually satisfactory, but unless invoices are paid in advance of receipt of the goods for the purpose of taking advantage of a discount the indebtedness is not acknowledged until the goods are received and inspected.

It is rather difficult to say that a purchase commitment, which is not a liability and need not be considered unless the price is higher than that prevailing at present, is changed into a current liability by the fact that goods have been shipped, when they have not been received. The author is not disposed in any case to insist upon a client's setting up goods in transit but has no objection to its being done.

In the verification of merchandise in transit it is necessary only to inspect the purchase invoices and see that the liabilities are recorded. The latter will, of course, not be necessary if the invoices have been paid in advance to obtain the discount. For a going concern it is not usually necessary to distinguish in the balance sheet between goods in transit and goods on hand.

Consigned Goods.

Merchandise consigned to another for sale is always the property of the consignor. There are two general forms of consignment; namely, that where the goods are consigned to a factor or broker for sale as the agent of the consignor, and that where the goods are placed with the consignee for sale on his own account, not as agent, and purchased by him at the time they are sold. Arrangements differ as to the degree of responsibility of the consignee for the goods, but in perhaps most cases where the goods have considerable value the responsibility is unlimited, and it is often stipulated that the consignee must keep the goods insured.

Goods consigned to others are usually charged to them on memorandum invoices at selling prices. Such charges should be made in the general books of the consignor at cost to a consignment account (however specifically designated), the inventory account being credited; but frequently the invoices are treated as representing sales and the charges to the consignees are included in the accounts receivable. In such an event, unless the amounts are very inconsiderable, the auditor should adjust the accounts by reducing the accounts receivable and the sales, and including the goods in the inventory at cost or market value, thereby eliminating the profit taken.

Consigned goods are subject to the same principles of valuation as other merchandise. If the amount is considerable they should usually be shown in the balance sheet as a separate item,

for the reason that the realization is likely to be slow. The existence of the merchandise should usually be verified by obtaining confirmation from the consignee unless there is a statement or correspondence on file which will serve the same purpose.

Consignments inward.—There is some difference of opinion regarding the necessity of recognizing in a balance sheet any liability on account of goods owned by others which are held on consignment. Such consignments should be shown on the books of the consignee in offsetting debit and credit accounts, as a matter of record, but the merchandise, as aforestated, is not the property of the consignee and there is no direct liability therefor until sold. The only real question is, whether or not there is a contingent liability.

It is contended by some that a consignee has a contingent liability for the value of goods consigned to him, for the reason that in the event of failure to account for the goods they must be paid for. It seems to the author that if all the reasonable and customary precautions are taken against loss by fire, theft, or other casualty with respect to consigned goods as well as other goods, there is no more reason for recognizing a contingent liability on account of the possibility of loss of consigned goods than of any other goods.

Manifestly, if a concern is not protected by insurance, and its movable property is not properly guarded, there is a constant contingency of loss of most of its physical assets. It follows that no such contingency needs to be recognized if it is reasonably provided for by insurance or other protective means; and that property held for others constitutes no exception. There is, therefore, no contingency on account of consignments if the goods are insured and otherwise properly cared for; as a matter of fact there is not even the necessity of insuring the goods unless it is contemplated by the consignment agreement.

Any advances made to the consignor on goods consigned should be carried as an asset under some such designation as "Advances on account of purchases." The auditor should see that consigned goods on hand are not included in the inventory, and if goods consigned to a concern are reconsigned to its customers they should not be included in either the inventory or the accounts receivable.

Verification of Computations.

The extensions and footings of inventories should always be tested, except in the case of a book inventory as to both quantities and values, when only the footings need be verified, as previously stated. The computations should be made and checked by the office staff—except in the rare cases when the inventory is taken, priced, and computed by the auditor—and each sheet should bear the names or initials of the persons responsible therefor; but notwithstanding the care which may apparently be taken in this respect, the auditor can seldom safely accept the computations without making some tests. This is true even though the calculations are made by an outside agency which makes a specialty of such work.

The extent to which the tests are carried should depend upon the volume of the inventory, the relative amounts of the items, and the care which has apparently been exercised by the office force. Under average conditions, the tests should cover the extensions of perhaps 5% of the number of items and 50 to 75% of the total amount, by selecting the larger amounts for verification; and all footings over $100. Most errors in extensions are due to misplaced decimals or to confusion of the unit; for example, applying a price for a gross as though it were for a dozen or for one. As stated in Chapter IV (page 41), the verification of footings need not extend to the cents.

The summary of the inventory should be checked completely and carefully, having in mind not only the mathematical accuracy but the propriety of the classification and of any other features which may be involved. It may be, for example, that extraneous items are added, such as equipment; or that deductions are made for unpaid invoices which should be taken up as liabilities.

Examination of Ledger Accounts.

In a complete audit, and to some extent in a balance sheet audit, the entries in the general ledger accounts for inventories, and for purchases and sales, should be examined. This subject has been covered at considerable length in the discussion of auditing from the original records, Chapters IV, V,

and VI. From the standpoint of the verification of the inventories at the end of the period it is especially desirable to examine the charges and credits to the ledger accounts when subsidiary perpetual inventory records are accepted as representing the merchandise on hand, the particular purposes being to ascertain that all charges to detail costs are for purchases and that adjustments have been made from time to time. The amounts of such adjustments may also be interesting as indicating the accuracy of the results obtained under the stores and cost systems.

Particular attention should be given to the closing of the accounts at the date of the inventory with respect to the inclusion of all purchases and sales to date and no more, the object being to establish agreement between the ledger accounts and the inventory with respect to the items comprehended in each. Great care in this regard is especially essential when the inventory has been taken over a considerable period, thereby necessitating adjustments for intervening receipts and sales or issues of merchandise.

Inventory Certificates.

Some auditors make a practice of obtaining from the officials of the concern a certificate as to the correctness of the inventory, unless it has been taken and valued by the auditor himself. Under ordinary conditions the purpose of requesting such a formal statement is merely to be sure that the inventory has received the proper attention from the executives; but there are cases where an overstatement or understatement of the inventory is suspected and it is desirable for the auditor to relieve himself of responsibility, or it is thought that the officials will not put themselves on record in writing as upholding or countenancing any mis-statement which is known to them and that the request for the certificate will be an effective means of confirming or refuting the suspicion.

There are good arguments both for and against the practice of obtaining such certificates. Those advanced by the proponents consist generally of the above statement of purposes. The fundamental idea seems to be that the verification of inventories, except as to clerical accuracy, is out of the province of an auditor, and he should obtain evidence as authoritative

as possible of their propriety. The opposing arguments are based upon the view that inventories are in fact subject to verification as a part of an audit, and that, in effect, there is no more reason for requesting a certificate with respect to an inventory than to cash on hand. It is stated that such certificates are signed perfunctorily, even if in good faith; and that if an inventory is misrepresented with the knowledge of the officials they will not hesitate to sign an auditor's certificate any more than they would a similar certificate embodied in the income tax return, which latter is much more significant, or any more than they would in causing the inventory to be entered in the accounts.

As a corollary to the fundamental belief that verification of the inventory is properly included in an audit, it is contended by those who oppose the obtaining of inventory certificates that the effect of requesting and obtaining such certificates is to give the client and those who read the report the impression that the auditor is adopting a narrow view as to his proper functions and is merely seeking to evade responsibility for the inventory. It is further contended that, as to auditing firms whose work is done largely by employees, even though it may be the policy of the firm to omit no practicable process in the verification of an inventory by reason of the obtaining of a certificate, the fact that a certificate is to be obtained tends to discourage initiative in independent investigation, if not absolute slight of the work of verification, on the part of the auditing staff. Some evidence of the human inclination in this direction is furnished by the alacrity with which auditors generally seize upon an opportunity of obtaining an independent certification of any asset or liability, and often overlook the necessity for examination of the account to determine that the balance to be verified is correct.

In consideration of these arguments for and against the practice of obtaining inventory certificates, the author believes that it should not be adopted generally, but that the expedient may well be employed in special cases where the auditor suspects irregularities or where conditions are such that no satisfactory evidence regarding the taking and pricing of the inventory can be had from the inventory itself or from collateral sources. The summary of an inventory should always be

approved by an official, and if that has not been done it is undoubtedly proper for an auditor to require it.

Form of inventory certificate.—An inventory certificate may cover the subject of quantities only or may also include the method of valuation. Frequently it comprehends a summary of the inventory as well. There are accordingly many forms, designed to meet various conditions as to subject matter, character of business, and so forth. On the opposite page is shown a form which is designed to cover all features which may be called for in a certificate for a manufacturing concern.

It will be observed that the certificate requested, as called for by this form, is openly qualified as being "to the best of our knowledge and belief." In the opinion of the author this is desirable for the reason that the work of taking and valuing an inventory is almost always entrusted to subordinates, and the most that an official may be expected to know is that proper instructions have been issued and that he believes that those instructions have been followed.

It will also be noted that the form calls for an explicit statement by the responsible official as to the basis of valuation of the respective classes of goods. This is thought to be better than for the auditor to state the basis and merely request confirmation thereof.

It may be that only one or two signatures to the certificate are needed; or perhaps even more than the three indicated in the form. This is a matter that must be determined in each individual case.

General Remarks.

It may be well to emphasize the fact that an auditor is concerned with an understatement as well as an overstatement of an inventory. Either of these may be due to errors or to manipulation, the effect of the latter depending upon the motive—whether it is advantageous to understate or overstate the assets and profits. Evidence of a desire in either direction should be notice to the auditor to give special attention to the inventory. It may be said in this connection that a financially weak concern is not likely to undervalue its inventory.

The author's time in the writing of this chapter has been largely wasted if he has failed to convey to the mind of the reader the predominating thought that in the verification of

INVENTORY CERTIFICATE
THE BLANK MANUFACTURING COMPANY
DECEMBER 31, 1923.

Summary of Inventory

Materials and Supplies		$103,245.69
Goods in Process		29,056.24
Finished Goods:		
At factory	$63,516.18	
At branch	12,921.03	76,437.21
Total		$208,739.14

Certificate

With respect to the inventory summarized above we certify, to the best of our knowledge and belief:

(1) That all quantities were determined by actual and careful count, weight, or measurement as of the close of business December 31, 1923, except as follows: ....

....

(2) That all merchandise included in the inventory is the unencumbered property of this company, except as follows: ....

....

(3) That no unsalable or unusable merchandise is included in the inventory at a higher value than that for which it can be sold, except as follows: ....

....

(4) That the other merchandise was valued as follows:

(a) Materials and supplies, at..............................

(b) Goods in process, at..................................

(c) Finished goods, at....................................

with the following exceptions:....................................

....

....

As to Quantities:...

(Title) ....

As to Values:...

(Title) ....

General Approval:...

(Title) ....

Dated: ....

.........................., 1924.

inventories analytical study of conditions and their causes and effects counts for much more than mechanical checking. Possession of the ability to study the subject in its broad, practical aspects is one of the characteristics that distinguish the professional accountant from the clerk.

Chapter XI

ASSET ACCOUNTS—Continued

Advances on Account of Purchases.

This asset is similar to that of merchandise, as it represents payments therefor, but it is one step removed from merchandise in liquidity, as the goods have not been received and the process of their conversion into cash through sale and realization is deferred. It is somewhat unusual for a concern to make advances on account of materials purchased except in a comparatively few businesses where goods are received on consignment or under some such special arrangement.

The verification of advances on purchases merely involves the obtaining of satisfactory evidence of the disbursements and regarding the purpose for which they were made. It may not readily be discovered, however, that such disbursements have been made. The advances may appear as debit balances in accounts payable. Any such debit balances should be investigated, and if it is found that they represent advances on purchases they should be classified accordingly; if they represent overpayments, and are not offset by credit balances in favor of the same concerns, they should be treated as miscellaneous accounts receivable. The advances may be carried on the books as accounts receivable, in which case they will be discovered only by examination of the charges to the controlling account or, possibly, the detail account, or be disclosed in the process of confirming the balance shown by the books as receivable.

An advance, purporting to be on account of a purchase, may in fact represent a loan on open account to assist in financing a supplier, rather than apply to a specific purchase. In such a case the amount should be treated as a loan, included in the current assets or otherwise, depending upon the apparent prospects of early realization.

Uncompleted Contracts.

The word "contracts" as used here is intended to mean contracts for construction of buildings, ships, and the like, as distinguished from ordinary manufacturing operations. This class of assets would usually also include the value of uncompleted enterprises such as moving picture productions. Assets of this character are treated separately from goods in process of manufacture, principally for the reason that the former are not usually regarded as current assets, although they may be in some cases.

The valuation of an uncompleted contract should represent cost, unless it is expected that the operation will result in a loss, in which event the value should not exceed the proper proportion of the amount realizable. If the contract calls for partial settlements as the work progresses, based upon completion of specific parts, the cost to complete that part of the work which is being billed may be transferred from the Uncompleted Contracts account and treated as cost of completed work, thus leaving the former to represent the expenditures on the unbilled portion.

Aside from the question of the cost of the uncompleted portion, it may be stated that it is usual for a certain percentage to be withheld from partial settlements as a guaranty fund; and conservative practice dictates that in the determination of the profit on completed parts of the contract, provision be made for claims by setting up a reserve of at least the proportion of profit pertaining to the amount withheld, until the final settlement is made.

The contract may call for payments on account as the work progresses without signifying thereby that any part of the work is regarded as completed and thus furnishing a basis for the determination of the cost applicable to the amounts collected. In such a case it is rather hard on the contractor to have to wait until the completion of the contract before determining the amount of profit that has accrued. The contract price is usually divisible into units, and if adequate records are maintained so that the cost of such units as have been completed can be determined, there should be no objection to transferring part of the cost as applicable to the completed portion, provided always that due allowance is made for the

possibility of increase in the cost of the uncompleted portion over the amount used as a basis for the corresponding portion of the contract price.

Even if the contract price is not thus divisible, or if conditions with respect to the uncertainty of the outcome as to cost have made it impossible sooner to approximate the profit accrued, when the contract is so nearly completed that it is possible to estimate with reasonable certainty the cost to complete the work, the profit to date may be determined upon the basis of such an estimate. Then the proportion of the contract price regarded as earned may be set up as the value of the contract and credited to income, which would be charged with the cost to date. The value of the contract thus determined would, of course, be reduced by the amount of any collections on account. If the contract is virtually completed it may be entirely proper to set up the whole amount of the contract (less collections) as an asset and to credit a reserve account (to be deducted from the asset on the balance sheet) with a conservative estimate of the cost to complete and of any allowances that may have to be made in settlement.

By thus determining the stage of completion of the contract from time to time, any expected loss, as well as profit, will be disclosed and will be written off in advance of the completion of the contract. The principal concern of the auditor in examining accounts representing expenditures on contracts is that they will in fact be recovered in the contract price; the only other feature is the verification of charges in the usual way.

Accounts for expenditures on moving picture productions and similar undertakings present no peculiar problems. If the production is being made under contract for sale at a certain price the same principles are involved as have been discussed; otherwise, there is nothing to do but verify the expenditures.

Under "cost-plus" contracts the expenditures are properly treated as accounts receivable, together with the percentage charged by the contractor.

Capital Stock Subscriptions Receivable.

Amounts receivable from subscribers for capital stock may be represented by notes or by open accounts supported by sub-

scription agreements—usually the latter. If the stock certificates have actually been issued and notes taken therefor, secured by the stock, the intention may be to have the notes represent the balances due on the subscriptions, but as the stock should not be issued until paid for, the asset really takes the form of a secured loan; however, such notes should usually be shown as subscriptions receivable, in accordance with the obvious intention.

These assets are discussed separately from other notes and accounts receivable for the reason that in many if not in most cases they are questionable current assets. It may, however, be proper to classify stock subscriptions receivable as current assets if they are collectible within a year and are being collected in accordance with their terms.

Verification of stock subscriptions involves examination of the capital stock records and of the subscription accounts and agreements; also of any notes taken, together with the collateral thereto, if the certificates have been issued.

Securities Owned.

The word "securities" is used here in its generally accepted sense as comprising stocks (including subscription warrants and the like), bonds, certificates of indebtedness, long-term notes, and mortgages. These may be carried as permanent or temporary investments or as stock in trade—the latter for a financial institution. As the method of verification is not essentially affected by the purpose for which the securities are held, that feature may properly be subordinated for the present and their common aspects considered first.

There are two general divisions of the auditing of accounts for securities owned; namely, (1) the determination of the propriety of the balance in the account itself, as to both book value and the specific securities it represents; (2) the verification of the possession of the securities called for by the account. These two operations are equally important, but many auditors are disposed to overlook the necessity for the former and confine their attention to the latter.

It may be proper in a balance sheet audit, as it undoubtedly is in the customary examination of a bank or brokerage house, merely to account for the securities shown by the books at the

date of the balance sheet, but that does not suffice in the case of a complete audit; nor should it, in the author's opinion, in a balance sheet audit where the securities are carried as investments and not as stock in trade. The account should be analyzed, for an indefinite period, so that it is known, at least, that the securities which should be accounted for are actually as indicated by the balance of the account. The composition of the securities account may be shown, of course, in a subsidiary ledger or record, with full details, but this is unusual for any but a financial or endowed institution.

Examination of the Account.

To determine the propriety of the balance of the account each debit and credit thereto during the period under audit should be traced to its source and verified. Unless full details as to the securities represented by the entries are shown by the account itself or by a subsidiary record, an analysis should be made for the audit working papers. This should show, as to each security: the complete description, including maturity and rate of interest (for other than stocks); the quantity (par or face value or number of shares) and book value at the beginning of the period; the quantity and cost of any acquired during the period; the quantity, proceeds, and cost of any disposed of during the period; and the quantity and book value constituting the balance at the end of the period.

The composition of the balance at the date of the balance sheet should be shown, in full detail, in the working papers even though it may not be necessary to include a complete analysis for the period. In this connection, it may be reiterated that nothing should be committed to writing and included in the audit working papers that does not have a practical value in the conduct of the audit or the preparation of the report thereon. In this particular case, it may be desirable, all things considered, to tabulate the security transactions and balances on one or more working sheets, whether or not the details are shown in the records in such a manner as to permit of checking thereto, as such a tabulation may be made to show concretely, in addition to the changes in securities, the income received and accrued and the profits or losses from sales during the period. In this manner it may be

possible graphically to exhibit virtually all the transactions of an investment or holding company, as well as its investments, on one sheet. Unless there is some such reason as this, however, there is usually no advantage in duplicating the records in the working papers.

Charges to a security account should be at cost, including commission on the purchase but excluding accrued interest purchased, which should be charged to the accrued interest account. Credits should also be at cost, the profit or loss being credited or charged to Profit and Loss or some other appropriately designated account. If only part of certain securities is sold the credit may be at average cost, or earliest or latest cost, whichever appears to be most appropriate in view of all conditions.

Stocks received as dividends should be added to the shares only, at no value; or for the purpose of record a nominal value of one dollar may be placed upon the shares, or upon each share, and credited to profit and loss. This is not only the conservative practice but accords with the actual import of the transaction. As the issuing corporation has parted with only a piece of paper, nothing more valuable is received by the stockholder; his proportionate interest in the corporation is precisely the same after the stock dividend as before. The same principle applies to subscriptions rights or warrants pertaining to securities held, which are received without cost but which may have a market value. If the rights are exercised, their value will be reflected in the reduced cost at which the securities of the new issue are purchased; in any event, no profit should be recognized until realization.

Valuation of the Securities.

The value at which the securities should be carried depends largely upon the purpose for which they are held and upon what is desired with regard to their classification in the balance sheet. The latter should generally be determined by, or be in consonance with, the former.

Temporary investments.—Securities held as temporary investments, including those held by financial institutions as stock in trade, and carried as current assets, should generally be valued at cost or market, whichever is lower. They should

never be valued at a figure greatly in excess of market. Those held as stock in trade may be valued consistently at market provided such market values are not the result of merely temporary inflation (which can usually be recognized by any one at all conversant with such matters) and further provided that any other related assets and liabilities, such as commitments, are stated at market. Valuation at the lower of cost or market should be advocated as the soundest practice.

What is market value? In the case of listed securities, it is the latest recorded sale or bid price for the security on the exchange where it is dealt in. If there has been no recent sale or bid it may be necessary to use the next subsequent sale or bid price. If the bid and asked prices are widely divergent it may be desirable to take their mean. Except as to small holdings of listed securities, market value may be called a theoretical concept, for the reason that in perhaps most cases where large amounts are involved if the securities were offered for sale in the market they would bring a price different from the current quotation or might not be readily salable at all. However, if good judgment is used in their application the market quotations may be accepted as a fairly accurate approximation of the actual value of the securities. At least they represent the valuations acceptable to banks for collateral and balance sheet purposes. The market quotations are available in most of the daily newspapers and in some other publications, notably the Commercial and Financial Chronicle.

Unless the securities are traded in on one of the exchanges there is little likelihood of the auditor's being able to determine any market value they may have. This brings us to the point where it is necessary to state more definitely what is meant by securities held as stock in trade and as temporary investments. These are virtually synonymous except that the former are acquired by financial houses in large quantities and sold over the counter like so much merchandise, and the latter represent investments of temporarily idle funds of companies engaged in other businesses. Obviously, it is essential that under all such conditions the securities must be readily marketable. If it develops that some of the securities thus acquired and held cannot readily be disposed of, this does not constitute an exception to the rule as to marketability, but only shows that the investor has involuntarily made a long-term invest-

ment. By this it is not meant that short-term (temporary) investments cannot be in long-term securities; the distinction between the term of the investment, as an act, and that of the security, as an instrument, should be noted. Long-term bonds, or stocks, which are readily marketable may be much better qualified to be classed as current assets than comparatively short-term bonds or notes for which there is no established market.

Another essential consideration as to temporary investments, which does not concern securities held as stock in trade, is that it should appear, at least, that it is the intention to hold the securities only temporarily, if they are to be treated as current assets. Granted their marketability, the guiding principle should be the intention in acquiring or holding the securities. The most readily marketable securities held as investments of a fire insurance or other reserve fund should not be regarded as current assets because there is no intention of disposing of them, but it is proper to include in current assets United States Treasury certificates of indebtedness purchased expressly for use in payment of Federal taxes or other securities held for similar purposes. Investments in stocks for the purpose of exercising control should not be classed as current even though the stocks are marketable; and it can usually be assumed that investments by business concerns in stocks, except a very few widely held listed stocks, are for some purpose other than as temporary investments of idle funds.

Stock subscriptions, etc.—When stock is subscribed for and payment is to be made in instalments, it is optional whether the full amount of the subscription be treated as an asset and the unpaid balance as a liability, or only the amount paid be carried as an asset, to be described in the balance sheet as a part payment. The former may be more in accordance with strict accounting theory, and may be absolutely required if the subscriber is committed to make payment for stock which has declined in value; but the latter is consistent with the generally recognized view that the investment is only the amount paid. This will virtually always apply if the stock has been actually issued without being fully paid, as the additional payments may never be called for and the stock is salable without regard to the amount paid.

As far as valuation is concerned, it is as easy to value an equity in a subscription for stock as the stock itself; and it is entirely likely that if the stock were to decline considerably in value before completion of the payments the subscription would be repudiated and the amount already paid forfeited. It appears, therefore, that in most cases it is proper to carry as an asset only the equity in stock subscriptions. This, however, should not be understood to mean that securities purchased through a broker and carried by him in a margin account should be similarly treated. In such a case the securities should be carried as assets at their purchase price and any balance due to the broker on account of the purchase should be treated as a liability, the same as though the securities were pledged with a bank as collateral for a loan.

Mortgages.—Whether mortgages are carried as temporary investments or otherwise, they may be regarded as worth their face value, provided the rate of interest is not below the prevailing rate and there is no evidence of inadequate security in the value of the property mortgaged.

Ordinarily, mortgages should not be carried as current assets unless there is reliable evidence that they will be collected in the near future. They may usually be regarded as temporary investments only when held by title companies or banks which make a business of disposing of them to the public. Mortgages are frequently sold by such financial institutions under their guaranty, which usually makes them attractive investments.

Second mortgages should always be described as such in the balance sheet. They may never be regarded as readily marketable at their face value.

Permanent or long-term investments.—Under this head will be considered the valuation of securities which cannot properly be designated in the balance sheet as temporary investments, including those which may have been intended to be temporary but which have proved not to be marketable and thus become involuntary long-term investments. In the same class as these are non-marketable securities acquired in settlement of debts.

Such involuntary investments, and any miscellaneous stocks, bonds, and the like, should be carried at cost or their estimated realizable value if less. An estimate of value may be made

upon the basis of the payment of dividends on the stocks or interest on the bonds, or it may be possible to obtain a financial statement which will show the intrinsic value of the security.

Investments of reserves.—Included in this category are securities representing investments of reserves such as endowments, insurance funds, pension funds, and replacement funds. Securities in sinking funds are excluded here for the reason that they are not investment securities in the ordinary sense and are subject to special rules.

These investment securities should usually be carried at cost unless there has been a considerable decline in their market value. Ordinary fluctuations in market value of such securities are of no interest, as the securities are held not for sale but for their yield of income; but a decline in market value cannot be ignored, as it may be a danger signal. Unless the auditor is instructed to the contrary, and so states in his report, he should ascertain the market values or, if there is no market, make such investigation of the intrinsic values as is practicable, and report any considerable discrepancies.

In the case of bonds held as permanent investments, the scientific method of valuation is to amortize premiums paid and accumulate discounts, so that at maturity the book value will equal the par value. The theoretically correct method of computing such amortization and accumulation, which involves consideration of compound interest, may be found in "The Accountancy of Investment" by Sprague-Perrine. The author believes, however, that it is seldom if ever necessary to carry the process to such fine points, but that an equal apportionment of the premium or discount over the remaining life of the bonds should suffice for all practical purposes. For example, if a 6% bond for $1,000, maturing in ten years, is purchased for $1,050, all that seems necessary is for $5 of each year's nominal interest of $60 to be treated as applicable to reduction of the principal, so that in ten years $50 will have been thus credited to the principal and the book value reduced to par value. The same principle would apply if the bond were bought for $950, the only difference being that the amount of $5 each year would be credited as though it were additional interest and be added to the principal, bringing it up to $1,000 at maturity.

The only difference between this equal apportionment of the premium or discount over the term of the bonds and the scientific method is that the latter contemplates the payment or receipt of an annuity with increments at compound interest, and therefore under that method the deduction from or addition to the book value increases from year to year. The only reason for the gradual adjustment of the book values with respect to premiums and discount is to equalize the income, and if there are both premiums and discounts to be considered it will usually be found that adoption of the scientific method will lead to just about the same effect upon income in any one year as would the equal apportionment without regard to compound interest.

Even though the book values of bonds may be adjusted periodically for the purpose of bringing them to par at maturity, the significance of market values should not be overlooked.

Investments in controlled companies.—Controlled companies are of two general classes, which may be designated as subsidiary and affiliated. A subsidiary company is one whose capital stock is owned entirely or almost entirely by another. The word "affiliated," as applied to corporations, is broader. It may apply to a company a large proportion of whose stock, usually a controlling interest, is owned by another, but in which there is a substantial outside interest; or may express the relationship of such a corporation to the one which exercises control over it or to another corporation in the same group. To illustrate: Company *A* may own 100% of the stock of company *B* and 60% of the stock of company *C*. From the standpoint of company *A*, *B* is subsidiary and *C* affiliated; from the standpoint of *B* and *C*, the three companies are affiliated, although the relationship between *B* and *C* is not as close as between *B* and *A*. Our present interest is in the stocks of *B* and *C* carried on the books of *A*; and only in the stocks of companies which are controlled through at least majority ownership. Those in which the ownership is less than control fall into one of the classes of investments previously discussed.

A satisfactory audit of and report on a parent company (one which owns or controls one or more other companies) involves the auditing of the controlled companies as well, and

the preparation of consolidated financial statements for the group. When this is done there is no special problem in connection with the valuation of the stocks of the controlled companies, as the assets and liabilities of those companies which are represented by their stocks are substituted for the stocks and the financial condition is disclosed as it would be if the controlled companies did not have a separate corporate existence, which presentation is desirable for practical purposes. The technique of the preparation of consolidated statements is too broad a subject to be considered here at any length. It is covered quite fully in the author's book on Accountants' Reports and in some other works.

When the auditor is not permitted to audit the accounts of the controlled companies, or to make a consolidated balance sheet with or without audit, it is necessary to give careful attention to the book valuations of the stocks of the controlled companies. Together with the stocks must be considered any advances to the controlled companies for permanent or working capital, which advances, although treated by those companies as liabilities, are for practical purposes investments by the parent company in addition to the cost of the stocks. Such advances, whether in the form of bonds, notes, or current accounts, should be shown in the balance sheet under the head of investments in subsidiary (or affiliated, or controlled) companies and added to the stocks.

Investments in controlled companies should never be classed as current assets unless there is evidence of a definite intention to dispose of them, and then should not be stated in excess of their realizable values. This does not apply to current operating balances between affiliated companies which are being settled periodically or to dividends declared by the subsidiary and receivable by the parent company, both of which may properly be regarded as current assets.

The valuation at which the stocks of controlled companies are carried should not exceed the net worth of the respective companies, as shown by their balance sheets, or the proper proportion thereof, having due regard to any inflation therein with respect to the valuation of good-will, revaluation of plant property, inventories, or other assets. These matters, of course, may be difficult if not impossible to determine unless the books of all the companies have been audited; but they

should be given consideration, and an effort should be made to procure sufficient information to permit of reaching at least a general opinion along broad lines.

When the parent company owns all the stock of the subsidiary except directors' qualifying shares, no consideration need usually be given to the minority interest; but when there are other minority stockholders their interest must be recognized and only the parent company's proportion of the net worth be taken into consideration. If the subsidiary or affiliated company is operating at a loss and has a deficit it is likely that the entire loss will have to be borne by the parent company, and therefore the minority interest should usually be computed at the par value of the minority stock. This, however, may be a debatable point and no invariable rule should be established.

When the stock of one company is acquired by another at a price which includes the surplus, any dividends paid from such acquired surplus should be treated by the holding company as a partial return of its investment, and accordingly credited to the investment account, instead of being taken into income. Whether or not this is done by the holding company the same result will be obtained by proper consolidation of the accounts so that the cost of the stock is offset against the net worth of the subsidiary at the date of the acquisition.

The auditor should fully protect himself in his report, by qualification in the balance sheet, certificate, or comments, if he is not fully satisfied regarding the valuation of any securities.

Verification of Possession of Securities.

As previously stated, it is desirable to account for marketable securities simultaneously with the verification of the cash balance in order to discover any action between the dates of the examination of the two classes of assets whereby a cash shortage is made good by selling the securities or pledging them for a loan, or securities which have been misappropriated are restored by repurchase or redemption. If the securities are not marketable there is, of course, no danger of substitution and they may be verified at any time during the progress of the audit.

The securities may be on hand, pledged as collateral to loans

or bond issues, deposited with a trust company or bank for safe-keeping, deposited in escrow or otherwise as security in connection with the performance of some agreement, or out for transfer or registration. They may also be deposited with a trustee or committee for some purpose, perhaps in connection with a reorganization, but in such a case there will be a formal, and usually negotiable, receipt or trustee's certificate which can be accepted in lieu of the securities themselves. It is also possible that the securities may be loaned to others, to be used by them as collateral to loans.

In all cases where the securities are pledged or deposited for some specific purpose a certificate or confirmation should be obtained from the custodian, unless a formal certificate is already in evidence, as mentioned above. The form of request for such certificate or confirmation is generally immaterial, except that it is usually better to have the custodian state what is held than to advise him of what the books show and ask him to confirm. This is often impracticable, however, as in the case of securities out for transfer or registration, when the request for confirmation should give all particulars. Except in the case of collateral to bank loans, which is covered by the form of certificate shown in Chapter VII (page 93), it is usual for the client to write to the various depositaries, trustees, or transfer agents, asking them to advise the auditor directly as to the securities held. It is seldom necessary that these letters be mailed by the auditor, as the institutions are usually well known and the replies are almost always on their own letter-heads.

All requests for certificates should be specific concerning the date as of which certification is desired and should call for a definite statement as to the purpose for which the securities are held. For example, if a bank is holding certain securities for safe-keeping, the auditor wants an explicit statement to that effect; not merely that the securities are held "for the account of" the company. This latter leaves some uncertainty in the mind of the auditor regarding the purpose for which the securities are held. It seems that the only way to be reasonably certain of obtaining the information desired in such a case is to word the custodian's reply for him, which involves a statement of the matters to be certified; but financial institutions do not generally like to sign and forward a certificate

without retaining a copy, except as to some routine matters. A request for confirmation of securities held for safe-keeping might be worded somewhat as follows:

> Please advise Messrs. Blank & Blank, Certified Public Accountants, 110 Broadway, New York, that you were holding for safe-keeping for our account at the close of business December 31, 1923, the following securities:
>
> $10,000 U. S. Steel Sinking Fund 5s
> 15,000 American Tel. & Tel. Conv. 5s
>
> A stamped, addressed envelope for your reply is enclosed.

A request for independent certification, as distinguished from confirmation, instead of naming the securities would read: "Please advise * * * * what securities you were holding for safe keeping * * *"

Whenever securities are pledged or are deposited under some arrangement whereby they are not available for use if required, the facts should be noted in the balance sheet. A deposit of marketable securities for a specific purpose may also constitute a reason for not including them in the current assets. For example, marketable bonds are not current assets if they are deposited as surety with a workmen's compensation commission in consideration of the company's being permitted to carry its own employer's liability insurance.

Securities on hand.—The examination of securities is a comparatively simple process except as to a bank, trust company, or stock brokerage house, where there is need for preliminary planning and extreme care to assure control over the securities prior to and during their examination, so that none can be added after control is assumed and none can be presented for inspection more than once. To maintain effective control it may be necessary to post a man at the entrance to the vault with instructions to observe and note everything put in and taken out. It may also involve the auditor's sealing the vault at night, unless there is a time lock, when the clocks should be examined by the auditor's representative and the closing and opening of the vault witnessed by him. It will involve control of the records of securities as well as of the securities themselves, until all are accounted for.

In the case of a financial institution it is necessary to verify all securities held, including those held in trust, as collateral to loans, for safe-keeping, or otherwise, in order satisfactorily

to account for the securities owned, unless the latter can be identified by numbers; however, it is usual in such an examination to verify all securities. The remarks to follow pertain to the examination of all securities, for whatever purpose they may be held.

Strange as it may seem, it is sometimes necessary for an auditor to insist upon the presence and attention of a representative of the client during the examination and count of securities. As has been said in connection with cash, the auditor must not lay himself open to possible blame for a shortage that may develop at the time, or subsequently, by being left alone with negotiable securities.

A schedule of the securities to be accounted for should be prepared in advance of their examination, as previously explained. It is usually rather unsatisfactory to list the securities at the time of inspection and compare the list with the records later. In the examination of financial institutions, it is often desirable for practical reasons to check the securities against the detail records or the client's schedule and to keep the securities under control until such records or schedule can be verified as may be necessary.

The auditor need not usually concern himself with the numbers of stock certificates, bonds, and the like, unless there are few securities or the accounts and records are in an unsatisfactory condition. The only practical reason for recording the numbers in the working papers is for reference in future audits with a view to detecting any fraudulent sale of the securities which has been covered up by purchase of different stock certificates or bonds of the same amount.

Stocks.—Stock certificates should be in the name of the client, be endorsed to him or in blank, or be accompanied by a power of attorney properly signed and witnessed. Ordinarily the certificates should stand in the name of the client; they must if he is to receive any dividends. Any laxity in this respect should be commented upon in the report. It may be desirable to examine certificates for stocks owned as to blank endorsements with a view to determining whether they have been used as collateral to a loan which may not have been recorded on the books. The absence of such an endorsement on a certificate would not be conclusive, however, as the certificate

might have been pledged with a separate power of attorney in lieu of the endorsement.

For stocks other than standard issues regarding which there may be no doubt, attention should be given to the matter of whether they are fully paid and non-assessable. If they are not, the certificates will show the payments made on account. Likewise, the certificates should show any amounts paid to the stockholder in partial liquidation of the stock. The certificates should be inspected with regard to their apparent authenticity as evidenced by the signatures of the officers of the corporation and of the registrar and transfer agent, if the latter are called for. This inspection should require only a casual glance.

Bonds, notes, certificates of indebtedness, etc.—These may be bearer instruments, transferable by delivery, with interest coupons attached, or may be registered as to principal or as to both principal and interest. If registered, they should be found to be in the name of the client or be properly assigned. Coupon securities should be examined to see that all subsequent coupons are attached. When there is a large number of these securities, as in the case of a financial institution, the examination in this respect should usually be limited to occasional tests.

The instruments should be inspected with regard to their apparent authenticity with respect to the execution by the issuing corporation and the certification by the trustee, if any. In the case of a financial house, however, where there is a large number of securities and it may be expected that their genuineness has been passed upon when received, the attention to this matter may be limited to very occasional tests. The principle is the same as that involved in the testing of cash on hand in very large quantities; there is very little chance of a thorough examination developing anything more serious than error.

Treasury stock and bonds.—The only special point to be considered in connection with the verification of securities of a company held in its treasury is that certificates for treasury stock should be in the name of the company or its treasurer. Companies are frequently lax in this respect, owing somewhat to the expense for revenue stamps involved in the issuance of new certificates.

The subject of treasury securities will be dealt with at some

length in connection with the discussion of capital stock and funded debt. It may not be amiss, however, to state here the general principle that treasury securities are those which have been actually issued and have subsequently come into the possession of the company, and therefore they do not include unissued securities. While unissued securities have no value, it is frequently necessary to inspect unissued bonds or similar securities on hand, as a check on the amount outstanding.

Mortgages.—The inspection of a mortgage is not conclusive evidence of the validity of the asset it purports to represent, as the debt may have been paid, and discharged of record by the issuance of a satisfaction piece, without the surrender of the mortgage itself. The most satisfactory proof of the validity of the instrument is to be had by examination of the public records. Under ordinary conditions, however, where no irregularity is suspected, and especially in the case of an unmatured mortgage, an auditor may be considered to be justified in accepting the documentary evidence, if in proper form, without recourse to the public records. If it seems desirable to carry the investigation to the extent of examination of the public records, in most cases the auditor will do well to employ a lawyer or title company to make that examination. Such work is not generally regarded as within the purview of an auditor's functions, and few auditors who have not had legal training and practice in such matters are willing to assume responsibility for an investigation of that character.

It seems that mortgagors should be requested to confirm past-due mortgages, but in the case of savings banks and other institutions where many of such mortgages are held, this procedure is often considered impracticable or undesirable. Substantially the same result may be obtained by examination to see that the interest on the mortgages is being collected regularly. In the absence of collusion with the mortgagor, confirmation by him would be virtually as effective as examination of the public records; and the alternative of accepting interest collections as evidence of the continued existence of the debt presumes only that the interest is in fact being received from the mortgagor and not from an accessory to the fraudulent misappropriation of the proceeds of collection of the principal.

In the physical verification of mortgages there are usually two instruments to be inspected; namely, the mortgage itself,

which is a conditional deed and constitutes the security for the debt, and a bond or note, which is the evidence of the debt. There may also be a note for each interest instalment, but these may be disregarded.

It is still the practice in some States for a bond to be given in a penal sum, usually double the amount of the debt as stated in the mortgage, to cover any costs which the mortgagee may have to incur in the event of foreclosure. The amount as stated in the mortgage is, therefore, the one to be considered. The mortgage may, in fact, be the only evidence of the debt; the only reason for having a separate bond or note is to facilitate enforcement of the claim in case of default. The mortgage is therefore the principal document and should usually be examined first; then if it calls for a bond or note, that should be inspected.

The mortgage should be ascertained to be properly signed, sealed, and acknowledged by the mortgagor or mortgagors named therein. The name of the mortgagee should be that of the client or the mortgage should be accompanied by properly executed assignments. The mortgage and any assignments should bear evidence of having been recorded in the public records. It should be noted whether the mortgage is a first or second lien on the property. A second mortgage is indicated by a statement to the effect that it is subject to another. Both the mortgage and the bond or note should be examined for notations of partial payments. This applies especially to past-due mortgages.

Mortgages differ from other receivables in that their being past-due is not necessarily an indication of doubtful value. As a matter of fact a past-due mortgage which is properly secured is generally regarded as a desirable form of investment, except in those cases where investors are primarily interested in the uninterrupted flow of income.

The auditor is, of course, not qualified to pass upon the value of the property mortgaged. In some cases he will expect to find appraisals of the properties and occasionally, in special engagements, he will undertake to procure such appraisals. The detailed description of the property is usually of no interest to the auditor but the location or other general description may well be shown in the working papers, for use in the report or otherwise.

If the property is improved, it is usual for the mortgagee to hold the insurance policies. These should be inspected by the auditor and some attention should be given to the amount of insurance carried. It may be that the matter of insurance has been neglected, with the result that the protection is obviously inadequate. Some holders of mortgages also require that tax receipts be submitted to and held by them. Whether or not this is done the auditor should satisfy himself that the payment of taxes is receiving proper attention.

If the mortgage is guaranteed by a title or mortgage guaranty company that fact should be noted and should be embodied in the description of the item in the balance sheet or schedule, on account of the additional security of the guaranty. Guaranteed mortgages are becoming quite common and are generally regarded as very high-class investments.

If the mortgage is out for recording there will usually be a receipt for it on file, in addition to the bond or note. As registry offices are notoriously slow, it is usually appropriate in such a case merely to mention in the report that the mortgage was not seen and to follow the matter up in the next audit; but if inspection of the mortgage at the time is regarded as essential it may be seen by visiting the registry office.

Ground rents.—In some States there is a well recognized class of investments known as ground rents, which represent rights to receive stipulated amounts as rent of land. These usually arise in connection with the sale of land, a certain annual rent being accepted in lieu of cash. Although property on which such rents are paid is legally held under a lease, and the recipient of the rent actually owns the property, for practical purposes ground rents may be regarded as of the same general class of investments as mortgages.

The investment value of a ground rent represents the capitalization of the income; for example, a ground rent of $60 per annum would usually be capitalized at $1,000. As in the case of mortgages, the only absolute verification of the ownership of the ground rent is to be had in the examination of the public records. A ground rent is, however, not represented by a separate document but evidence of its existence is contained in a deed conveying the property subject to the ground rent. Although it is possible that rent may continue to be received, from some source, after the property has been conveyed un-

conditionally and the ground rent thereby released, it seems that an auditor is justified in accepting the continuance of the receipt of the rent as evidence of the continued existence of the asset.

Sundry Investments.

The investments outside of the physical property used in the regular operations of the business, other than securities, will usually consist of real estate; memberships in associations and exchanges not represented by capital stock; and policies of insurance on lives of officers or proprietors. Some concerns may include in this class of assets the amounts invested in unincorporated branches, but in all such cases the accounts should be consolidated and the assets and liabilities of the branches, represented by the investments or advances by the home office, spread in the balance sheet as though they were all carried in one set of books.

Investments in real estate not used in the regular operations of the business will, for convenience, be discussed in the next chapter under the same head as real estate used in the business.

Memberships in trade associations, stock and produce exchanges, and the like, are represented by membership certificates, when not by stocks. As these certificates have no value other than as representing a privilege, which is usually known by the auditor to be exercised, it is seldom necessary to take the trouble to examine them, unless it is to ascertain in whose name they are held. Such memberships should be carried at cost.

Life insurance policies.—It is fairly common for a business concern to carry insurance on the life of its principal executive, especially when the conditions are such that the business would suffer materially from his death. The policies representing such insurance have an investment value and, with the exception of one class of insurance, have also a cash surrender value, usually after three years' premiums have been paid. The exception is term insurance, which is written at the lowest rate and provides protection for a definite number of years only, practically the same as fire or casualty insurance.

When the life of an individual is insured in favor of a business concern, the premiums on such insurance paid by the concern may be regarded as advance payments to provide re-

sources with which to indemnify the business for anticipated losses in the event of the death of the individual or to discharge obligations which are expected to arise at that time. The treatment of these payments in the accounts should depend upon the purpose of carrying the insurance. As a matter of practice, however, it is largely dependent upon the policy of the management with respect to conservatism.

If it can be assumed that the individual will continue to be actively identified with the business until his death, and that it will be thought desirable to keep the policies in force, the amount of insurance to be collected will almost certainly exceed the premiums paid, and it would therefore seem proper to capitalize all the premiums paid; that is, charge them to an asset account. This is evidently the principle which has actuated the United States Treasury Department in disallowing premiums on such insurance as expenses for income tax purposes. Dividends received should, of course, be credited to the asset account if not deducted from the premiums.

Notwithstanding the propriety of treating premiums paid as an asset, it seems that if the object in carrying the insurance is to furnish protection against anticipated losses upon the death of the insured, it is necessary to provide a reserve out of the present profits against which such losses may be charged when they are sustained. This result can best be accomplished, in the author's opinion, by capitalizing the premiums and concurrently creating a reserve on the books by charges of the same amounts to expenses; then the investment account, to be realized upon, will be offset by a reserve account, against which future losses can be charged. As far as the future is concerned, the same purpose may be accomplished by treating the premiums as expenses when paid, but this practice is open to the objection that it creates a secret reserve which will be disclosed only upon the realization of the insurance. If, on the other hand, the premiums are capitalized without creating a reserve, realization of the insurance will merely have the effect of conversion of one asset, the investment account, into another asset, cash—except as to any difference between the recovery and the premiums paid, which will have to be considered in any event. In this way a fund will be made available for distribution in case the business is liquidated, but

the business may not be able to continue without impairing its capital through losses.

Thus it will be seen that unless the purpose of insuring the life of an executive is merely to provide a cash fund with which to discharge obligations, the object is best effectuated by writing off the premiums, and that it is preferable to do so indirectly; that is, by capitalizing the expenditures and at the same time creating a reserve of equal amount. While this conclusion is predicated upon the assumption, as stated, that the concern will in fact realize upon the insurance, the only possible criticism of the plan, in its application to any conditions, is on the ground of its ultraconservatism. It admittedly withholds from distribution out of the present profits to provide for what may be a remote contingency; but the carrying of the insurance indicates that the contingency is regarded as real enough to warrant making provision for.

Under this plan of capitalizing the premiums and creating an equivalent reserve, if there is any change in the conditions, whereby the insurance is discontinued, it will be necessary only to transfer the reserve to the asset account and to credit to profit and loss any recovery on the policies in the form of cash surrender value or such value as may be agreed upon in case of assignment to another beneficiary. The particular point to be noted is that credits, and not charges, to profit and loss are deferred.

There are two alternatives to this plan. One, the least conservative, has been mentioned; namely, merely capitalizing all the premiums. Aside from the failure to provide a reserve for expected losses, it is open to the objection that the insurance scheme may be abandoned for one reason or another and then it would be necessary to write off at one time the excess of the premiums paid over the surrender value of the policy. It is thought that premiums on term policies, at least, should not be included in such a plan of capitalizing premiums.

The other plan is a compromise. It contemplates treating as assets only the cash surrender values of the policies. Such values are usually shown in the policies and begin to accumulate after two or three years' premiums have been paid. The procedure involves a division of the premiums after the second or third year, part being charged to expense and part to the asset account, the former decreasing and the latter increasing

from year to year. This plan is subject to no other criticism than that the margin between the face of the policies and the value at which they are carried is reduced each year, thereby lessening the only effective protection against losses. It may be reasonable to suppose that the necessity for a reserve against losses decreases with the lapse of time, but in the author's opinion this plan should not be put into operation until such time, if ever, as the insurance is not needed as provision for losses and would be cancelled if it were not for its accumulated value, which is not fully expressed in the amount for which it may be surrendered.

Under either of the first two plans outlined, the asset account could never be included in the current assets. Neither should it under this last plan in most cases, because, although the policies can be realized upon for the values at which they are carried, it is not the intention to do so. A bank will properly exclude such an item from current assets in its analysis of a balance sheet for the purpose of passing upon an application for a loan. Life insurance policies, however they may be valued, should be carried as investments unless there is a definite intention of surrendering them in the near future.

The verification of a life insurance policy involves examination of the accounts therefor and the policy itself. As to the accounts, nothing need be added to what has been said. The policy should name the concern as beneficiary or there should be an assignment, which, to be effective, must be acknowledged by the insurance company. If the valuation purports to be the cash surrender value it should be verified by reference to the table contained in the policy or by correspondence with the insurance company. If the policy is pledged as security for a loan, confirmation should be obtained from the pledgee, which will usually be the insurance company.

There is no value attaching to employees' group life insurance other than possibly the unexpired portion of the premium paid in advance for a year, which may be carried as a deferred charge.

In the case of an individual who keeps personal accounts and desires to record the value of his life insurance, probably the best practice to recommend would be the carrying of the policies at their cash surrender values. It seems that there

should be no objection, however, to carrying as assets the net premiums paid, exclusive of term insurance, up to the face of the policies.

Sinking Funds.

In technical accounting parlance the best usage of the word "fund" is to designate an asset. The Standard dictionary defines the noun as "a sum of money or stock of convertible wealth employed in, set aside for, or available for a business enterprise or other purpose"; however, it gives as one specific use: "an invested capital, the income from which is devoted to a special object; a charitable trust; a foundation."

The only occasion for confusion regarding the propriety of the application of the word "fund" to specific assets or to the intangible thing they represent is when it is necessary to distinguish between assets and liabilities for accounting purposes. For general purposes, when the "John Doe Endowment Fund" is mentioned it makes no difference whether what is meant is the cash, securities, or other property in that fund or the amount considered as a measure of the institution's accountability with respect to the trust. They should be the same amount in any event. When, however, the assets constituting a "fund" represent a trust, gift, or appropriation to be accounted for, it is necessary for accountants to distinguish between the asset and the liability—using the word "liability" in its broad sense—and it is therefore desirable to adopt uniform nomenclature as a means of identifying each of them. While a fund is generally regarded as an asset, and the word should usually be employed in that sense, it is common in governmental and institutional accounting for the liability to be thus designated, and the representative assets to be described as investments of the fund. This practice is well established and, in the opinion of the author, nothing is to be gained by an auditor's departing from it when other terminology may not be readily understood by the persons interested.

A sinking fund is an asset. It may or may not be offset by a liability account; that is, a reserve. The necessity for creating a sinking fund reserve is discussed in Chapter XV (page 298 *et seq.*). As the existence of the fund itself is not affected by the presence or absence of a reserve the subject need not be considered here.

A sinking fund is nearly always established for the redemption of funded debt, and is under the control of the trustee for the bonds or other indebtedness. The fund may be for other similar purposes, such as the redemption of preferred capital stock, amortization of a leasehold, or provision for contingencies, but in such a case it will usually be designated as such; it will, however, be subject to virtually the same procedure in verification as an ordinary sinking fund except that the assets may be held by the company itself instead of by a trustee and will be verified in the same manner as ordinary investments.

A sinking fund for the redemption of bonds is originally cash paid to the trustee. In accordance with the terms of the mortgage securing the bonds the trustee may purchase some of the bonds from time to time as sufficient cash is accumulated. These bonds may be cancelled by the trustee or be kept alive and draw interest, being marked, however, in some such way as "Property of the sinking fund; not negotiable." If the bonds purchased are cancelled, the sinking fund and outstanding bonds will both be reduced, so that the only bonds carried in the sinking fund will be those which are to be kept alive or those which will later be cancelled.

The sinking fund may possibly be invested in securities other than the bonds for the redemption of which it was created, depending upon the terms of the mortgage, the availability of the bonds in the market, or other conditions. The fund may therefore consist of securities, uninvested cash, and accrued interest on the securities. The former two will be held by the trustee, and will be verified by certification obtained from him (usually a trust company) in connection with the certification as to bonds issued.

If the securities are bonds of the company, as they usually are, they should be carried as assets of the sinking fund at par value, and usually deducted in the balance sheet from the bonds issued. Premiums or discounts on purchases should be charged or credited to profit and loss, the same as though the bonds were retired. If the sinking fund bonds bear interest, the interest will be collected by the trustee and added to the fund; therefore, the accrued interest should be carried on the books and in the balance sheet as part of the sinking fund, and not be deducted from the accrued interest payable. The cash in the sinking fund should, of course, also be carried accord-

ingly, and not as part of the current cash balance. When the securities held are not those of the company they may usually be accepted for valuation purposes at their cost to the trustee.

The auditor should become familiar with the sinking fund provisions of a mortgage and ascertain whether or not they are being complied with. If not, the matter should be mentioned in the report. It is not usual to accrue the payments to be made to the trustee, but it is sometimes desirable to do so, by charging the sinking fund account and crediting an accrued liability account, when a considerable amount has accrued and will be payable in the near future, in order accurately to exhibit the company's cash position.

In the case of voluntary sinking funds, that is, those where the company is not obligated to set aside assets for a specific purpose but has undertaken to do so, if the amounts set aside are less than the corresponding reserve or otherwise fall short of the stated purpose, the matter should be mentioned in the report.

CHAPTER XII

ASSET ACCOUNTS—Continued

Land, Buildings, and Equipment.

The group of assets to be considered here is what is generally described as fixed assets or capital assets, except that for convenience this discussion will also comprehend real estate held as outside investments, that is, not held in connection with the regular business, and real estate held by dealers as stock in trade, neither of which is usually classed with the other property items. There is the further difference that groups designated as fixed or capital assets generally include intangible assets, such as patents and good-will, which will be covered in the next chapter.

As far as the balance sheet classification is concerned, the author prefers to group the physical properties used in the business, or held for such use, under the head of "Property" or "Plant Property," and to show separately the intangible assets and any physical properties held as outside investments. It seems desirable to separate the physical from the intangible assets in any event; and, although it is not so essential, to distinguish between properties employed in the business or held for that purpose and those which may be disposed of without interfering with the business. Properties of the latter class are comparatively seldom encountered, and usually consist of real estate which has been acquired in settlement of a debt or which is held on account of the personal inclinations of an executive. Properties of this character should not be confused with those such as housing accommodations for employees, which are usually held only when regarded as necessary to the business.

The classes of assets comprehended in the subjects to be discussed in this chapter are:

Land—improved and unimproved, including mineral and timber rights, etc., not subject to the payment of royalty.
Buildings—structures of all kinds.
Equipment:
  Building equipment—usually included with buildings.
  Machinery, implements, tools, and similar equipment.
  Furniture and fixtures—including office appliances, etc.
  Automobiles and trucks.
  Horses, wagons, and harness.
  Railroad cars and vessels.
  Containers in circulation—boxes, bottles, etc., used for shipment or delivery and returnable.
  Advertising signs, etc.

While this is a fairly comprehensive list, there may be other kinds of property which would come under the same general classification and would be subject to the same principles as to valuation and procedure in verification. One is farm livestock which is not specifically held for sale; such property is not essentially different in character from horses, included in the list, which will be discussed as representing that type of property. Another variety is railroad tracks, sidings, and the like, which may be considered as being in the same general class as buildings or building equipment.

Features of Verification.

The verification of property accounts is almost entirely concerned with the valuation of the respective units or classes of property. Physical inspection of the properties is not necessarily involved in their verification as it is with respect to some other assets. Even as to values, the verification by an auditor is limited, as he is not supposed to be an appraiser but must determine values from the books or such other data as are available.

While, as has been said, the auditor is not usually expected to verify the physical existence and condition of property items, he should not overlook any opportunities to do so as far as is practicable. It is often feasible and desirable for an auditor to physically account for such units of property as

automobiles and horses, and such items as diamond drills, which are used in mining operations; and even casual inspection may enable him to form some opinion regarding the value, as indicated by their condition, of buildings and other structures, road-bed and equipment of a railway, and similar large items.

Verification of title to real estate.—Title to real estate—land and buildings—is almost always conveyed formally in a deed, which must be recorded in the public records to assure protection of the title to the grantee. The single exception to title being evidenced by a deed is in the case of property acquired by inheritance, when the source of title is in a decree of a probate court. Land and its appurtenances therefore differ from other classes of property, which may be conveyed more or less informally by transfer of possession or by means of a bill of sale. In order to verify the ownership of real estate it is necessary to determine that it has been legally conveyed and that the conveyance has been properly recorded.

As has been stated in the preceding chapter concerning mortgages, which are conditional deeds, the possession of the instrument, even though it has been recorded, is not conclusive evidence of its present validity. It is possible that the property represented by a deed on hand may have been sold, as it is not usual for the seller of property to turn over his deed to the purchaser. The only absolute proof of the continuance of title is to be derived from inspection of the public records. There is little danger of the property having been sold without public record having been made, as it may be assumed that a deed will be recorded by the grantee promptly to protect his interests.

As a rule, however, unless the auditor has reason to suspect irregularity he is justified in accepting a deed, properly recorded, as evidence of acquisition of title to the property, and he need not concern himself regarding the possibility of a subsequent transfer of title provided there is evidence that the property is still owned, which may be furnished by continued occupancy without the payment of rent, by the receipt of rent for the property, or by the payment of property expenses, such as taxes and insurance. Tax bills, at least, are made out in the name of the owner of the property of record at the time. It is, of course, possible to dispose of part of a unit of prop-

erty without accounting for the proceeds and without there being any noticeable effect upon these secondary evidences of continuance of ownership, but such a contingency is very remote. It is rather unusual for parts of units to be sold except by dealers in land. In the audit of any such enterprise great care should be taken to account for each parcel of land. The auditor should examine the public records himself or obtain a certificate from a lawyer or title company as to the parcels recorded as owned at the time.

A deed can seldom be accepted as evidence of the price paid for the property, as the consideration stated is usually nominal and the only indication of the actual price may be the revenue stamps affixed. For this purpose, the deed should usually be supplemented by a purchase contract showing particulars concerning the price and the method of payment. The deed, however, will show any existing encumbrances on the property at the time of purchase; also any limitations of ownership—for example, whether title rests solely in the grantee or he has an undivided interest. In some special cases it is desirable for an auditor to have a search of the public records made, to determine whether any liens on the property have been recorded since its acquisition.

A deed should usually be in the name of the equitable owner of the property. There are cases, however, where for some reason property is nominally held by another. Sometimes there is an agreement between the parties at interest regarding the equitable ownership, which is binding as to such parties. When the title stands in the name of another the auditor should so state in his report, unless he is satisfied that the interests of the equitable owner are fully protected by a collateral agreement.

Valuation.

Valuation of property items may properly be either at cost with appropriate reduction for depreciation or at appraised present value. The latter usually represents depreciated replacement cost; that is, estimated cost to replace less depreciation based upon such estimated cost and the age and present condition of the property. Valuation upon such a basis is usually described as appraised sound value.

Land is not usually subject to depreciation as are structures

and equipment. It may, of course, decline in value, but such decline need seldom be considered unless the property is to be offered for sale. Land used in a business may not diminish in value as an income-producing capital asset even though it could not be sold for the amount it cost.

Financial institutions frequently carry their property, especially furniture and fixtures, at nominal values, for the sake of conservatism. There can be no serious objection to this being done by any concern so long as the values are reduced to the point where there can be no misunderstanding of the intention on the part of minority interests, but the auditor should decline to conceal any undervaluation which may possibly be misleading as to the profits of the business.

Value to a going concern.—Perhaps the most important point to be considered in connection with the value of physical property is the difference between its value to a going concern and to a liquidating concern. It is utterly impossible to place a valuation on property that must be sold unless there is a valid offer to purchase. At a forced sale land may bring almost any conceivable price, and structures and equipment may not bring more than their salvage value.

Even in the case of real estate held for sale by a dealer, it should be recognized that properties are likely to have a greater sale value if they can be disposed of by negotiation in the ordinary course of business than if they are sold under the hammer. The valuations of properties held for sale, however, should bear a more direct relation to current market prices than is necessary for properties held as permanent investments, either for rental or for use in a business. In this connection, it may be stated that real estate is not extensively carried for sale as a commodity. Dealers in real estate are largely development companies which buy tracts of land, subdivide them, and sell lots, sometimes erecting buildings on them; or other speculators who buy and sell one property at a time. Unless such properties are disposed of promptly it is likely that a loss will be sustained.

It is a well recognized principle in business, banking, and accounting that, unless there is some reason to the contrary, assets should be valued upon the basis of their worth to a going concern; in other words, it is generally assumed that the business will continue and that there will be no necessity

of sacrificing the assets. This principle is fundamental to the existence of confidence, which is essential in all business matters and indispensable to the credit structure of the country.

The land used in a business may be known to have declined in market value owing to changes in the community over which the business has had no control, but if it continues to produce income its value to the business as a going concern is not diminished. On the same theory, there would be no justification for considering that the value of the land to a going concern was increased if its market value had enhanced instead of declined, or if the income derived from it had increased. As long as the land is continued in use, it is worth no less and no more by reason of any such changing conditions as have been cited. It may be desirable, however, to recognize a considerable diminution in market value as a measure of conservatism, especially if there is any likelihood of disposing of the land. This latter is a matter that seldom concerns an auditor, except as he may encounter a reduction of land values in the accounts or may be called upon to give advice on the subject. Auditors frequently, however, have to pass upon unrealized appreciation of land values. This subject is discussed later in this chapter (page 226 *et seq.*).

While the value of land to a going concern is not generally subject to decline, the same does not apply to buildings and equipment. Such property, unlike land, wears out; moreover it may become obsolete or inadequate. There is, nevertheless, a difference between recognizing the reduction of asset values due to depreciation, and considering that the assets have only such values as may be realized from forced sale. The subject of depreciation will be discussed more extensively later in this chapter.

Determination of cost.—Regardless of the valuation at which the various classes of property are carried, it is necessary in a complete audit to determine their cost. It may not be necessary to do so in a balance sheet audit if appraised values are used, except in so far as a proper statement of surplus is concerned, as hereinafter explained (page 227).

The procedure of verifying the charges to the accounts purporting to represent cost involves merely reference to the records and supporting vouchers relating to the disburse-

ments, and usually presents no special difficulty. It is necessary, however, to subject such charges to critical analysis with a view to determining whether in fact they do represent cost. There are some important questions involved in the determination of property costs, which will now be considered. For the present no attention will be given to credits on account of disposal of property, the purpose being to arrive at an understanding as to what is properly included in cost.

Prime cost.—All classes of property are subject to the same principles with regard to the original or prime cost. This consists of the amount paid for the property, as evidenced by vouchers, contracts, and the like. When real estate is purchased, buildings are being constructed, or large units of equipment are being installed under contract, it is usually desirable to examine the contracts, and sometimes the corporate minutes, as well as the vouchers for disbursements. The reason for doing so concerns not only the verification of the cost as recorded but also the matter of commitments on uncompleted contracts, as hereafter explained (page 223 *et seq.*).

Property paid for in capital stock.—When the consideration paid for the property is in the form of capital stock of the purchasing corporation, the cost will be the par value of the stock; or, if the stock has no par value, the cost will be its value as declared by the directors or stockholders in compliance with the law of the State in which it is incorporated, and the requirements contained in its certificate of incorporation or by-laws. Valuation of property at the par value of capital stock issued therefor may be in excess of the actual value of the property, but as long as the stockholders or directors (whichever are required under the by-laws) have properly authorized the transaction the auditor is usually not in a position to criticize their action. He may, however, if he has reason to doubt the propriety of the transaction, state on the balance sheet or in the comments of his report that the property valuation represents, or is based upon, the par value of the stock issued therefor.

Such a qualification as this is very seldom actually necessary, and even when it is, the auditor is usually taking an untenable position in challenging the action of the governing body of a corporation unless there is evidence of bad faith in the transaction. Capital stock is frequently issued for

property when the cash value of the stock is considerably less than par, but in such cases, even in the event of dissolution, usually the only persons to suffer are those who accepted the stock, and sometimes the other stockholders. The interests of all stockholders are affected during the continuance of business by the necessity for the corporation's earning enough to provide for depreciation on the inflated asset valuation; and the stockholders other than those who took the stock for property, if any, suffer in addition by reason of the diversion of part of the profits to pay dividends on the par value of stock issued for property in excess of its actual value. These, however, are only the usual incidents of organization of many corporations which are inadequately financed at their inception.

There is little danger of overstatement of property valuations when capital stock without par value is issued for the property. The same general principles govern as when the stock has a par value, but there is usually no necessity of or motive for placing a valuation on the property in excess of its actual value.

There is no denying the propriety of valuation of property at cost at the time of purchase, even though that cost may be in excess of the amount at which the property was previously valued by the seller. This may permit of appreciation of property values through a process of reorganization of a corporation, but so long as all legal requirements are complied with, the auditor cannot usually object. It is seldom that anyone is deceived by such a revaluation unless it is a minority stockholder, who may think that his stock certificate is worth more after the reorganization than before. Any lender on the security of the property will satisfy himself regarding its value independently of the books.

If various classes of property are purchased in a lot, whether paid for in cash or otherwise, the aggregate cost should be allotted to the respective classes by those informed —usually by the directors in the case of a corporation. If such allotment has not been made the auditor should endeavor to make it upon the basis of the most reliable estimates obtainable.

Land and buildings.—These two classes of property will be discussed together, for the reason that for practical pur-

poses they are generally inseparable. Buildings will be considered to include all such exterior structures as gas holders and towers, although some of these structures may, in practice, be found to be classified as equipment.

In addition to the prime cost, as stated above, the cost of real estate will include expenditures for title insurance, surveying, recording fees, and the like. When land and buildings are purchased for possession of the land only, the buildings not being wanted, and the buildings are razed, it is proper to charge the whole cost to the land, including the cost of demolishing the buildings, less any salvage. Other proper additions to land values are improvements to grounds, such as grading; assessments or other payments for municipal improvements such as paving and sewers; and, usually, the cost of easements, such as rights of way.

Mortgages on real estate.—When real estate is purchased subject to a mortgage, or a mortgage is assumed, correct accounting procedure requires that the amount of the mortgage be set up as a liability and the total cost be charged to the asset account; in other words, it is not regarded as proper to capitalize only an equity in the property. In this connection, however, it should be stated that there is a legal distinction between buying property subject to a mortgage and assuming the mortgage.

When property is purchased subject to a mortgage the purchaser is liable on the mortgage only to the extent of the value of the property; that is, in the event of foreclosure and of the failure to realize sufficient from the sale of the property to pay the mortgage, the mortgagee has no claim on the owner of the property for the deficiency and must look to the mortgagor. This can be changed only by some act of the purchaser of the property whereby he becomes personally responsible for the debt. It is sometimes held, therefore, that when property is purchased subject to a mortgage the purchaser acquires only an equity, and that the mortgage need not be recognized as a liability. From the accounting viewpoint this is a fallacy, for the reason that the purchaser must pay the interest on the mortgage and must pay the principal at maturity or else render himself liable therefor by negotiating an extension—unless the mortgagee prefers to

carry the mortgage without extension so as to hold the mortgagor personally responsible, which would seldom happen.

There is, of course, no doubt that when a mortgage is assumed by a purchaser, or when he places a mortgage on the property, the mortgage should be treated as a liability. In the author's opinion it is always desirable to show mortgages on which interest is paid as liabilities on the balance sheet, but in some cases it may be necessary to recognize the legal status by deducting the amount of a mortgage from the total real estate valuation, including that amount, on the face of the balance sheet.

There seems to be no doubt of the propriety of considering only the equity in property owned subject to a "ground rent," such as is common in some States. As explained in Chapter IX (page 200), such ownership is legally only a leasehold interest, but full title may usually be acquired by paying the capitalized value of the annual ground rent.

Carrying charges.—Charges such as interest, taxes, and insurance are undoubtedly, in theory, additional costs of property held for sale or future use. Whether or not such charges should be capitalized is, however, a practical question to be determined in the light of all the conditions.

Such charges should not be capitalized in the case of an existing plant or building which is in service, or has been in service but is now either temporarily or permanently idle, unless it is held for sale and there is good reason to believe that the addition to the book value of the carrying charges will not result in showing a loss on the sale. The same principle applies to carrying charges on real estate purchased or improved specifically for sale. The governing consideration should be conservatism in the valuation of the property, so that the recognition of losses will not be deferred.

It is generally recognized as proper to capitalize carrying charges on land purchased specifically for future improvement and use. The length of time during which this is done should, of course, be reasonable (no more definite rule can be given), but it seems that it would generally be proper to do so as long as there continued to be a definite intention of using the property and not selling it. The practical feature of conservatism should, of course, not be lost sight of in such a case. Carrying charges accumulate at an amazing rate; in-

terest on an investment in urban property and taxes thereon will double the cost in approximately ten years.

There is probably no serious question concerning the propriety of capitalizing interest, insurance, and taxes during construction. They are legitimate elements of cost in any event and it would be illogical to state that a business or enterprise sustained a loss by reason of such charges during its incipiency. As a general rule, it is proper to capitalize any expense directly or indirectly related to construction, whether or not such expense can be demonstrated as actually increasing the value of the property.

In addition to interest, insurance, and taxes, the owner of the property may have to incur legal expenses in connection with the construction project, which are properly chargeable to its cost. Further, the executives may devote a considerable part of their time to supervision, diverting their attention from other matters, and a proportion of their salaries may therefore be properly chargeable to the cost of construction.

Interest, discount, etc., capitalized.—It has been stated that under certain conditions it is proper to capitalize interest. So far, there is little difference of opinion, but concerning the basis of charging interest there is a decided lack of unanimity among writers and practitioners. The moot question is whether the charge should cover interest on the entire investment, regardless of whether the funds invested represent the owner's or borrowed capital, or only interest paid on borrowed money. If any part of the funds invested represents the owner's capital, the charging to cost of interest on the investment creates a credit in the income account which represents a return on his capital, and shows that a profit is made before the property is used or sold. If the interest capitalized is only that paid on indebtedness incurred on account of the investment, the owner shows neither profit nor loss with respect to such interest—assuming that the rate charged is the same as that paid, which it should be.

It is frequently impossible to determine the source of funds invested in the property. The business may borrow large amounts for general purposes as well as for construction, and the funds derived from the various sources thus become indistinguishable. It may be, of course, that bonds are issued for the definite purpose of providing funds for the construc-

tion, but such financing is seldom sufficient to raise all the funds for the purpose, and it is necessary for the concern to draw upon its own funds or the proceeds of floating indebtedness. The fact that there is total interest-bearing indebtedness equal to the expenditures for construction is not conclusive evidence that all the funds therefor are borrowed, especially if there were loans before the construction was commenced.

It seems that, as a general rule, if interest during construction is capitalized it should be only such amount as is paid on funds borrowed for the specific purpose; that is, on bonds, mortgages, or floating indebtedness which can be definitely connected with the expenditures for construction. The effect of this, as before stated, is that the business will show neither profit nor loss from the property during the period of construction, which is generally desirable.

This general rule is subject to the exception that the Interstate Commerce Commission, and most of the State commissions having jurisdiction over intrastate public utilities, permit the companies under their control to capitalize interest on the whole amount expended in construction, without regard to the source of the funds and whether or not the interest has actually been paid. The reason for this is undoubtedly that virtually all the capital of such companies used for construction purposes is borrowed and that the security holders—stockholders as well as bondholders—are entitled to a return on their investment before the completion of the construction and the commencement of income-producing operations. This appears to be a rather dangerous rule for general use with respect to the capitalization of interest not actually paid.

When interest on funded debt is capitalized, it is also proper to capitalize the related amortization of discount and expense on the securities during the period of construction. Correspondingly, amortization of premium on funded debt should be applied in reduction of the cost of construction. The total discount and expense in connection with the issuance of securities is not a proper charge to construction; and of course an entire premium should not be credited.

When all financing expense is capitalized, any related financial income should be credited to the construction accounts. This would apply to interest on bank balances representing unexpended funds acquired for construction purposes, and

cash discounts on purchases. Under other conditions, the author is disposed to believe that true cash discounts on purchases should be credited to income and not treated as deductions from cost. This matter is more fully discussed in Chapter XVI (page 321).

Additions and betterments.—It is often difficult to determine whether additional expenditures on existing property, of any character, should be capitalized or charged as expenses. The treatment in doubtful cases is generally dependent upon whether the expenditure in question increases the value of the property as an income producer, or, in some cases, its sale value; in other words, whether or not the expenditure represents a permanent improvement which will yield a return, either in increase in revenue, reduction of expenses, or increase in sale value.

While an additional expenditure on the property, to be capitalized, should meet this requirement of increasing the economic capital of the business, it is also necessary to inquire into the book value of the property which it is proposed to increase. An expenditure may be made to improve the property without being properly capitalizable. It is necessary that the capital of the business be kept intact by making provision for the ultimate replacement of capital assets necessitated by their becoming unfit for further use. If this has not been done, and the book value of the property does not represent its actual value, even to a going concern, an expenditure on the property may in fact increase its value, for either use or sale, but may be merely a restitution of capital exhausted in previous operations and therefore be properly chargeable against those operations, and not to the property account.

This question involves consideration of the large subject of depreciation and replacement reserves, which will be covered a little later. It may be stated at this time, however, that expenditures of any considerable amount which are stated to represent improvements to property should be thoroughly investigated to see whether they are not actually for replacements. If they are they should be charged to the property account only after the book value of the property replaced has been written off, either to the reserve or to the appropriate expense or profit and loss account.

The cost of alterations to buildings which do not increase their capacity, and of relocation of equipment, should generally be charged as expense on the theory that there is no consequent increase in the value of the property. In perhaps most cases such changes are necessitated by mistakes in judgment in the original plans or by the changing requirements or whims of tenants and others, and they are usually not compensated for in the way of additional revenue. It is proper, of course, to capitalize the entire cost of alterations when it can be demonstrated that the changes will result in increased revenue or reduced expenses, or where it is necessary to make alterations in order to fit the property for use, when the cost of the alterations would be regarded merely as additions to the original cost. This latter might apply, although it usually does not, to alterations made considerably later than the acquisition of the property. The cost of alterations for a tenant is properly spread over the term of the lease.

There is, of course, no doubt as to the propriety of capitalizing any excess of the cost of alterations over the cost of the original work which is altered, if the latter can be determined. This point is pertinent only when costs have advanced materially or when there is some actual addition to the previous facilities. As a practical matter it is usually impossible to determine the original cost of partitions which are moved and of installation of equipment which is relocated, and it is almost always a question of whether all or none of the cost of the alterations is to be capitalized.

In the process of verification of charges to capital accounts for additions and betterments, it is often difficult to determine whether the items represent actual improvements or repairs or replacements. Ordinary repairs should, of course, be charged as expenses, unless, as sometimes happens, there is a reserve which is intended to provide for repairs as well as replacements. Modern accounting procedure calls for provision being made for replacements through a reserve for depreciation, and, as previously stated, expenditures for that purpose should not be capitalized unless the property replaced has been written off.

Charges for current repairs can usually be identified with little difficulty by examination of the vouchers, unless the concern itself made the repairs and was at the same time engaged

in construction work on its own property. This is frequently done by manufacturing concerns. Charges for materials issued from stores and for labor of the concern's own employees can usually be distinguished as to purpose only by reference to the internal orders under which the work was done, if there are any. In a well regulated factory there is likely to be a system of work orders covering repair and construction work as well as production, and the original order to which materials and labor have been charged should show the nature of the work.

Construction work and extraordinary repairs involving the expenditure of large amounts, whether done by the concern itself or by others, are frequently specifically authorized, and the funds therefor appropriated, by the management—usually the board of directors in the case of a corporation. Particularly as to construction work, the auditor should look in the minutes, or inquire of the executives, for evidence of such authorization or appropriation and should compare the amount authorized with that expended, in relation to the degree of completion of the work. Any considerable excess of cost over authorization, whether already experienced or expected, should be commented upon in the report.

In doubtful cases the auditor should take the position that evidence must be adduced to support any contention that expenditures are proper capital charges. Often he may satisfy himself on the point by physical inspection of the property which is said to have been improved. If any considerable amount is erroneously capitalized the accounts should be adjusted; if there are comparatively small excessive charges the matter may be mentioned in the comments of the report or be disregarded, depending upon its relative importance.

Uncompleted construction, etc.—There can be no doubt that when property is purchased and title has passed it becomes an asset, whether or not full payment has been made; and any unpaid balance on the cost becomes a liability, in the form of a mortgage or otherwise, regardless of the terms as to settlement. There is also no doubt that property under contract of purchase is not an asset until title to it is acquired; and accordingly the amount to be paid therefor does not become a liability until that time. There is, nevertheless, some doubt as to the status of contracts for construction, installa-

tion of equipment, and the like, which are in progress of execution. The question is whether the amount of the contract should be set up as an asset and a liability when the work is commenced, or the capital account should be charged only as the cash is disbursed or upon the completion of the work.

The situation seems to be the same as with a contract for the purchase of goods which have not been received, except that in the latter case the setting up of a liability on the books would be offset by the creation of a current asset on the books, whereas a liability for a purchase of capital assets would not be thus offset. In the opinion of the author there is no sufficient reason for recognizing as a liability the amounts to be paid on a contract for construction, or for the purchase of equipment, until such time as payments become due in accordance with the terms of the contract, as when a certain part of the work is completed or equipment is delivered, or unless there is some question of damages to be paid on account of non-performance of the contract. There seems to be no essential difference in this respect, ordinarily, between work performed by outsiders on a contract and work done by the concern itself. In the latter case the question never arises as to any liability on account of the work still to be done, and the property accounts are charged as the materials are purchased or used and as the pay-rolls are disbursed.

Although it is not necessary to capitalize expenditures in advance, and create corresponding liabilities, it is impossible to exhibit the financial condition of the concern correctly without recognizing the amount of expenditures contracted for or expected to be made on work in progress. Whether or not the concern has supplied itself with current funds with which to make the expenditures, they will have to be made in the near future, and unless reference to the impending liability is made in the balance sheet it will be misleading as to the current assets which are available for general purposes. Therefore, mention should be made in the balance sheet of any considerable amount which the concern is committed to pay in the near future on account of construction work in progress, whether under contracts with others or for its own account. This remark may be in the form of a foot-note to the balance sheet or be incorporated parenthetically in one or more of the property items shown therein; preferably the former.

While, in accordance with the foregoing, the practice of setting up as a liability the amount to be paid under a contract is not advocated, there should be no objection to doing so if the liability item is properly described.

Improvements to leased property.—An asset account thus designated will represent alterations and additions to leased premises made by tenants to suit their requirements, including fixtures installed which are not legally removable. Lease periods are usually rather short, and in the majority of cases they terminate before the improvements installed become unserviceable. As the improvements become the property of the lessor upon the surrender of the premises, unless there is an agreement to the contrary (which is seldom), and there can usually be no assurance that the lease will be renewed, it is necessary, as a rule, to amortize the cost of the improvements over the period of the lease, possibly including any extensions optional with the lessee, regardless of the physical life of the property.

Such comparatively minor improvements as these are generally treated in the balance sheet as deferred charges and not included with the physical property. There should, however, be no serious objection to classifying them as property items, especially if they are to be written off over a long period. Buildings erected on leased land usually call for different treatment from the ordinary improvements to leased premises. It is seldom, if ever, that a building is constructed on leased land unless the lease runs for a period at least equal to the expected useful life of the building; they are usually for from 63 to 99 years. Under such conditions the building may be treated for accounting purposes as owned in fee simple, and should be depreciated accordingly.

Appreciation.

Thus far consideration has been confined to the cost of property assets, or their value based upon cost. It is very often necessary, however, for an auditor to pass upon values admittedly in excess of cost or depreciated cost.

Property values are so largely a matter of personal opinion, and practices with regard to depreciation and to capitalization of additions and betterments are so variable, that it has be-

come quite customary when a business is reorganized or refinanced to have an independent appraisal of its property made and to adjust the accounts accordingly. Such appraisals include land at its current market value and buildings and equipment at cost of replacement new less depreciation based upon such costs and the age and present condition of each unit.

Since 1914, appraisals upon these bases have almost invariably indicated greater values than were shown by the books, except where the provision for depreciation was grossly inadequate. The prices of building materials, equipment, and the like, with few exceptions, increased steadily from 1914 to 1920; and while there has been some decline from 1920 to 1923, costs are still greatly in excess of those prevailing in the pre-war years, and it seems likely that a permanently higher plane has been established, largely owing to the marked changes in the labor situation. Using 1914 as a base of 100, the average of construction and equipment costs from 1919 to 1923, as stated by a prominent appraisal company, have been approximately as follows: 1919, 180; 1920, 230; 1921, 195; 1922, 185; 1923, 195. The market value of land in nearly all communities is constantly increasing.

Many concerns, some of which were previously very conservative in their charges to capital accounts and with respect to depreciation, have had appraisals made, and have adjusted their accounts for tax purposes so as to obtain the maximum possible allowances for invested capital and for depreciation or depletion. Others have appreciated their property values for the purpose of increasing their charges for depreciation in order to make their operating costs more consistent with those of competing or allied concerns which acquired their properties at advanced costs.

Appreciation of property values may be justified, if at all, by the property having been acquired for less than its real value; by ultraconservatism in writing off improvements and in provision for depreciation; or by an increase in replacement cost, less depreciation computed upon that basis, to an amount upon which a fair income return can be realized. There can be no real justification for appreciating values of capital assets, which are to be continued as such, to a point where a reasonable rate of income cannot be earned on the amount regarded as the augmented capital or investment. It will be seen from

the figures cited in the foregoing that there has been a decrease of approximately 15% in construction and equipment costs from 1920 to 1923; and the concern that capitalized its property at 1920 costs is burdened with a very high depreciation charge, and may find it difficult to earn a reasonable return on the increased capital.

Under ordinary conditions, an auditor will do well to advise against appreciation of property values in accordance with appraisals at current prices. It is desirable to have an appraisal made occasionally, especially when costs are rising, for insurance purposes, but no good purpose is usually served by adjusting the books to higher valuations. However, it seems that an auditor cannot decline to recognize an appraisal of property that appears to be reasonable and authoritative, whether made by an independent appraiser or by the proprietor or officials of the concern itself. The auditor may, and should in almost all cases, state in his balance sheet all the pertinent facts regarding the appraisal; that is, that the value as stated represents an appraisal, by whom it was made, and the date at which it was made.

There should be no doubt of the propriety of valuing on the books, upon the basis of an appraisal, property which has been acquired by gift. A manufacturing concern, for example, may be furnished plant property as an inducement to locate in a certain town. The treatment of the value placed upon such property is subject to the same rules as apply to appreciation of values above cost.

A very important feature of appreciation of property is the treatment of the credit arising from the increase of the asset accounts. Unless it is evident that the appreciation represents adjustment of previous overcharges against operations for depreciation and for improvements written off, the credit should be segregated from the surplus from operations and clearly designated in the balance sheet. If the concern is a sole proprietorship or partnership, appropriate qualification should be made in the statement of the capital account or accounts; if a corporation, the amount of appreciation should be shown as a separate surplus account, with proper designation.

For a corporation, the procedure most expressive of the actual import of the appreciation of property is to pay a stock

dividend equal to the amount of the appreciation. By this means, the nominal capital is increased to correspond to the increase in the capital assets, and the temptation to use the special surplus for improper purposes is obviated. As stated before, any appreciation which is justified may properly be regarded as additional capital. In this connection, it may not be amiss to caution the auditor that a stock dividend should be charged against any book surplus arising from revaluations, and not against the surplus from operations, until such special surplus has been exhausted.

Depreciation and Depletion.

It is likely that more has been written on the subject of depreciation than on any other subject in the field of accountancy. In "The Accountants' Index," published by The American Institute of Accountants, there are 338 pages devoted to merely the bibliography of depreciation to 1920. It is obvious, therefore, that only the very general features may be considered within the limits necessarily set for this book.

In their broadest significance, depreciation and depletion are means of reserving out of earnings amounts sufficient to keep intact the capital invested in wasting property assets, so that when it becomes necessary to replace the property in order to continue business, additional capital will not have to be invested for that purpose. The theory of the whole subject is based upon continuity of the business: if the business is to continue it is necessary to provide for the replacement of wasting assets; if the business is organized for a single venture, such as mining and selling the coal from a certain tract, it is not necessary to do more than keep the buildings and equipment in serviceable condition until the purpose is accomplished.

Continuance of a business without the necessity of additional investment to replace exhausted capital is not only fundamental to the theory of depreciation and depletion but is contemplated by the laws governing corporations. Such laws almost invariably require that dividends shall be paid only from profits, and that the capital invested by the stockholders shall not be returned to them except upon the observance of specified procedure, involving notice to the public who may be

creditors, and with the knowledge of the stockholders themselves.

There is one well recognized exception to this general rule; namely, that corporations engaged in mining, timbering, and similar operations, involving the exhaustion of natural resources, may legally return their capital to the investors and need not retain it for investment in other fields when the original resources are exhausted. It will be assumed, however, in the discussion to follow, that the business is to continue, and that it is therefore necessary to make provision for the exhaustion of the capital assets.

Granting, then, that it is necessary to maintain the integrity of the invested capital, it remains to be decided how that should be done. In this connection, consideration must be given to the principles of valuation touched upon earlier in this chapter, principally with respect to whether the exhaustion or decline in value of the property shall be determined from the standpoint of a going concern or otherwise. An automobile, for example, may be estimated to have a useful life of five years and thus, roughly, be subject to depreciation at twenty per cent a year from the standpoint of a going concern, although its sale value may decline fifty per cent or more the first year.

There seems to be no doubt that property in service should generally be depreciated in such a manner as to accord with the probable length of service, regardless of its sale value. There are cases, however, where exceptions to this rule must be made, as where values are affected materially by obsolescence, inadequacy, casualty, or other influences not connected with usage. Properties held for sale are, of course, not subject to the same principles of depreciation as are those used in a business. The former may be depreciated, but the effect is that of revaluation, which should be made to accord with changing conditions from time to time.

Depletion.—Depreciation and depletion, as processes for which provision must be made, are alike in that they both represent exhaustion of capital assets; but they differ in this respect, that depreciation of buildings and equipment, while known to be going on, cannot be definitely recognized and measured from day to day, while depletion of natural resources can be specifically identified. Depletion of mineral

deposits, timber, et cetera, is closely analogous to consumption of any commodity on hand: a ton of coal taken from a mine calls for virtually the same accounting treatment as a ton of coal taken from a bin for use as fuel.

Depletion of natural resources should therefore be regarded as exhaustion of commodities. To revert to the above illustration, the only difference between the ton of coal taken from the ground and the ton taken from the bin is that the number of tons in the bin is definitely known, whereas the number in the ground must be estimated; in either case the cost of the ton is an aliquot part of the total cost of the original supply. When the original content of the property may be reasonably estimated, determination of the cost per unit (perhaps ton or thousand feet) involves merely division of the total cost of the property by the number of units estimated as being recoverable.

It is sometimes impossible to estimate in advance with any degree of certainty the quantity recoverable; in fact there is often doubt as to whether there will be any yield. In any case where the outcome of the venture continues to be speculative, the entire cost of the property, together with the development expense, should be written off as soon as possible.

In fixing a rate of depletion, allowance should be made for any residual value of land owned in fee after it has been worked. Frequently only the mineral or timber rights are acquired, in which case there can be no question of land values; and when the title to the land is held the residual value is often regarded as negligible, so that no deduction should be made therefor. In the case of large tracts of timber land, title is often acquired and held with the intention of perpetuating the supply of timber through reforestation of sections as they are cut. Under such conditions a value should be placed upon the land separate from that of the timber. Periodic cruises should be made to determine the quantity of standing timber, and the accounts adjusted accordingly.

When the available supply increases, and is also subject to decrease through forest fires or other casualties, it is usually necessary to adopt a more or less arbitrary rate of depletion. It is always desirable to include in the cost of production some charge for depletion, even though the amount be credited to profit and loss. When it is necessary to use an arbitrary

rate of depletion the rate may be the amount which is ordinarily paid as royalty for the same kind of timber or other commodity in its raw state when cut, mined, or otherwise taken from leased property, unless a careful estimate of the quantity which the property may be expected to yield indicates that such a charge is insufficient to amortize the cost or appraised value of the property.

When an arbitrary rate of depletion is used, frequent comparisons should be made of the remaining quantity, as indicated by the unamortized book value of the property, with the quantity shown by recent surveys or cruises. If the book value appears to be excessive the rate of depletion should be increased or a lump sum should be written off at once. If the book value appears to be too low, the depletion rate may be reduced or the asset value increased. An adjustment to increase the asset account should be analyzed; whatever amount represents adjustment of previous depletion should be credited to profit and loss and any appreciation of the original value credited to a special surplus account. Increasing the asset account is usually preferable to reducing the rate of depletion, provided the rate used leaves a reasonable margin of profit.

When property subject to depletion is appreciated for any purpose except as a mere adjustment of depletion, the amount of the appreciation should be credited to a separate surplus account, as has been stated. The full charge for depletion will be included in operating expenses, but such part thereof as applies to the proportion of the total book value which represents appreciation should be credited to profit and loss and charged to the special surplus account. To illustrate: if the cost of the property is $3,000,000 and it is appreciated $1,000,000, depletion based upon the total book value of $4,000,000 will apply 75% to cost and 25% to appreciation; therefore 25% of the depletion charge should be transferred to the special surplus account.

Provision for depletion should generally be carried on the books in a reserve account, but it seems logical to deduct the reserve from the asset account in the preparation of the balance sheet. In view of the fact that the reserve is merely the measure of exhaustion of the commodity represented by the asset account, it seems unnecessary to show the deduction

of the reserve on the face of the balance sheet. The fact that provision is being made should, however, be brought out by appropriate description of the net book value.

Depreciation.—In the sense of decline in value, depreciation may be due to wear and tear, which includes the action of the elements, to obsolescence, or to inadequacy. It is impossible to make a forecast which will cover the contingencies of obsolescence and inadequacy, so it is obvious that there can be no general rules concerning provision for them. The requirements in that respect have to be determined in each particular case. Normally it is assumed that buildings and equipment will remain serviceable until their physical condition deteriorates to the point where the cost of repairs will be prohibitive, and that their useful life will not be affected by such extraneous influences as obsolescence and inadequacy.

Considering wear and tear as the only adverse influences, it is possible to forecast with approximate accuracy the useful life of buildings and equipment of various kinds under varying conditions of service. Buildings and some classes of equipment depreciate whether or not in use; and frequently they depreciate more rapidly when they are not, as minor repairs are then likely to be neglected. Factory buildings are usually subject to more strain, because of the vibration caused by machinery, and consequently have a shorter life than such structures as dwellings and office buildings. Some equipment, notably that of contractors, depreciates more rapidly than others through being exposed to the weather.

There are a few classes of equipment that can be valued with reasonable accuracy only by means of a physical inventory and appraisal, but as to most classes of depreciable property it is practicable to establish a rate of depreciation, to be applied to the original cost or appraised value, and thus dispense with physical inventories. It may be said in this connection, however, that it is desirable for a concern to maintain a detailed record of the units of the various classes of property, showing full particulars as to their acquisition, cost or appraised value, depreciation, and final disposition.

Land is not subject to depreciation in the ordinary sense, although it may, and often should, be revalued to give effect to changing conditions. This applies especially to unim-

proved land, and particularly to agricultural land, which often declines in intrinsic value on account of decrease in fertility.

Depreciation rates.—The fixing of a rate of depreciation involves consideration of the cost or appraised value, the expectancy of useful life, and the estimated salvage value, if any. As an illustration, let it be assumed that a machine cost $500, that it is expected to last ten years, and that its salvage value at that time is estimated at $100. Then it will be necessary to write off $400 over a period of ten years (disregarding any adjustments necessitated by inaccuracy of advance estimates). There are various theories under which this may be done. There is the "straight-line" method, which distributes the amortization evenly over the period; the sinking-fund method, which involves, actually or constructively, the establishment of a sinking fund which, with compound interest, will equal the amount to be amortized at the end of the period; the method under which the rate is applied to the diminishing balance of the asset account, thereby causing the depreciation charges to decrease as the cost of the repairs increases; and perhaps other methods.

These various methods are discussed at great length in several books on the theory of accounting, and it seems unnecessary to do so here. It may be said, however, that in actual practice an auditor seldom encounters any but the straight-line method and the method under which the depreciation is computed upon diminishing balances; and that in nearly all cases where the latter method is employed it is done under a misapprehension, and the rates are therefore too low to provide a sufficient reserve at the end of the period.

The author favors the straight-line method of equal apportionment over the period, because it is the simplest and is sufficiently accurate for all practical purposes as a means of apportionment of a charge which is at best an estimate. Under this method, the amortization of $400, in the foregoing illustration, would be at the rate of $40 for each of the ten years of expected life, or at 8% of the cost of $500 for each year.

There is no definite standard of measurement of the life expectancy of various classes of property. The United States Treasury Department, which is about the most authoritative

source of expression on the subject, has declined to commit itself other than by ruling that depreciation rates must be "reasonable," and by indicating the broad limits within which rates will be thus regarded for tax purposes. An extensive study of available data which may be regarded as authoritative has shown the author that nothing more definite than widely divergent approximations can be derived therefrom.

The following are very general indications of commonly accepted estimates of the useful life of the respective classes of depreciable property, under usual conditions:

	Years
Buildings:	
Concrete	50-60
Brick	40-50
Frame	25-30
Building equipment—elevators, etc.	15-20
Machinery and factory equipment	8-15
Furniture and fixtures, including office appliances	5-15
Automobiles	3-5

Translated into average annual depreciation rates, with some allowance for salvage values, the above terms of life would be somewhat as follows:

	Per Cent
Buildings:	
Concrete	2
Brick	2-½
Frame	3-½
Building equipment	5
Machinery, etc.	7-½
Furniture and fixtures	10
Automobiles	20

These rates are, of course, very general. They are intended to cover only wear and tear and it may be desirable to increase them to provide for possible obsolescence or inadequacy. It may be said incidentally that there has been a decided tendency in recent years to make unduly large provision for depreciation, which is undoubtedly explained by the effect upon income taxes at the high rates of taxation.

It should be understood that the foregoing rates, or any other average rates which may be regarded as reasonably standard, apply to property under ordinary conditions of use. It has already been stated that the length of life of property depends upon the use to which it is put and the conditions with

regard to exposure and so on. In addition to such considerations, it may be necessary to make allowance for temporary abnormal conditions such as manufacturing facilities being worked overtime.

Under the straight-line method, depreciation should be computed at the rate adopted as applied to the balance of the asset account. Provision for depreciation should begin to accrue from the date each unit goes into service or as near thereto as practicable. If the computation is made monthly it should be based upon the balance of the account at the beginning of the month, excluding any charges for property not yet in service. When the computation is made annually it should be based upon the average of the twelve beginning monthly balances in the account, unless the changes have been negligible, when the balance at the beginning of the year may be used.

Depreciation by revaluation.—It has been stated that there are a few classes of equipment that can be valued with reasonable accuracy only by means of a physical inventory and appraisal. Such classes are small tools, containers in circulation, live-stock, and any others where it is impracticable to maintain physical control over quantities, and where, as in the case of animate objects, the length of service is affected by peculiar influences over which the business management may have little control.

Small tools may be inventoried periodically and valued in accordance with their depreciated condition, or a fixed amount may be carried on the books as representing the value of the minimum supply and all replacements be charged to expenses.

Containers in circulation, such as boxes, barrels, cans, bottles, and reels, used by bakeries, milk and beverage dealers, cable manufacturers, and the like, cannot usually be inventoried physically, but it is possible to estimate the quantity in circulation in accordance with the volume of the output and the purchases of the containers. In some cases containers held by customers will be shown in their accounts, whether or not a charge therefor is made. Care should be taken not to duplicate the valuation of containers by taking up an inventory value when they are included in the accounts receivable.

Bottles may, of course, be valued at cost of the quantities

estimated as in circulation; boxes, barrels, and the like, should perhaps be valued at half of cost. As in the case of small tools, the value of containers in circulation may be fixed at a certain amount and remain constant unless there is a considerable change in the volume of sales. The principal concern of the auditor in such cases is to ascertain whether any systematic and apparently logical effort is made to estimate the values. If the containers in circulation are charged to customers at an amount in excess of their actual value there should be a reserve for such excess.

Live-stock (usually horses, but sometimes cows and other animals) may possibly be depreciated upon the basis of expectancy of useful life, but it is usually better to inspect the animals and determine their physical condition as the basis for revaluation. Heavy draft horses which are well cared for will last much longer than those used for light vehicles. Many dairy and express companies, which still use large numbers of horses, have established fairly accurate average mortality rates for their animals and depreciate them accordingly. Others write them down to almost a nominal value when acquired.

Patterns, lasts, etc.—Equipment such as patterns, designs, lasts, and book plates, derives its value solely from the ability to sell at a profit the product in the manufacture of which it is utilized. In the valuation of this class of equipment conservatism should be the foremost principle; its cost should be written off out of the first profits from the product. There can be no justification for continuing to carry any such items as assets after the production of the product is discontinued. The auditor should scrutinize closely any additions to such an account and unless the production is unquestionably stable should usually insist upon some reduction in book value being made.

Depreciation upon basis of depletion.—When buildings and large units of equipment are employed in a mining or timbering operation, and will become valueless, or virtually so, upon the exhaustion of the natural resources, and it is estimated that this will happen before the depreciable property will itself wear out, the rate of depreciation should be such as to amortize the cost less salvage value by the time when operations are expected to cease. The rate of depreciation to be

used in any period will correspond to the rate of depletion for the period, representing the proportion of the total estimated available supply of the material at the beginning of the period which has been exhausted during the period.

Reserves for depreciation.—Provision for depreciation may be credited directly to the asset account or to a reserve account. The latter is preferable and is now fairly general practice. It permits of showing, without analysis of the account, the original cost or appraised value of the property in service and the amount of depreciation provided against it.

As a reserve for depreciation represents an estimate of the decline in value of the asset, it seems that it is logical to deduct the amount of the reserve from that of the asset account in the balance sheet. The fact that the reserve is only an estimate does not change its character of a deduction from the asset. To take a parallel case, the consumption of any materials may be estimated, but the amount of the estimate is none the less a deduction from the cost of the original supply in stating the materials as an asset. In the last analysis, there can be only three classes of accounts—assets, liabilities, and proprietorship or capital. A reserve for depreciation can be neither a liability nor proprietorship, and must therefore be a deduction from an asset.

There are some classes of business, however, where custom makes it necessary for reserves for depreciation to be shown on the liability side of the balance sheet. Such are railroads and other public utilities under the jurisdiction of the Interstate Commerce Commission and most State public service commissions. There are occasionally other cases where it seems desirable to adopt the same practice, as where the amount reserved bears little or no relation to the amount of the asset.

When any credits have been made to the asset account for depreciation there can be no possible doubt that a reserve subsequently created should also be applied in reduction of the asset balance. This condition is frequently encountered when property has been appraised and the sound, or depreciated, value has been set up as an asset. The preferred procedure in such a case is to set up the gross appraised value as an asset, and the deduction for depreciation as a reserve, adding subsequent accruals of depreciation to the latter.

As has been stated as applying to depletion (page 231), to which reference is made for full explanation, when depreciable property has been appreciated and the amount of appreciation has been credited to a special surplus account, the amount of depreciation for each period applicable to the proportion of the total book value which represents appreciation should be credited to profit and loss and charged to the special surplus account.

Retirement of Property.

When a unit of property is retired from service and is sold or otherwise disposed of, its book value—whether cost, appraised value, or depreciated value—should be removed from the asset account. The proceeds of sale, the allowance received in exchange for a new unit, or the recovery from scrap may be credited to the asset account, and deducted from the book value of the unit, or may be credited to the depreciation reserve or to a clearing account designed to furnish a record of such transactions. The bookkeeping procedure is immaterial so long as the property accounts are cleared of units retired and all recoveries are properly accounted for. The replacement of a unit of property, as evidenced by a charge for a new unit, is notice to the auditor that a recovery from salvage or trade-in value should be looked for, and the absence of any such recovery must be properly explained.

It is a generally accepted principle that when a unit of property is retired from service its book value should be completely written off. This means that the asset account should be cleared of the book value of the unit, and if provision for depreciation has been credited to a reserve the amount thereof should also be cleared; and that if the provision for depreciation has not been sufficient to write off the book value less salvage, the deficiency should be charged to profit and loss at the time of retirement. It follows that any excess of the provision for depreciation of the unit, plus the salvage, over the book value, should be credited to profit and loss.

This principle is properly applied in the case of very large units of property, and may be for smaller ones if the rate at which the particular unit has been depreciated is as nearly

correct as an estimate of depreciation can be. In actual practice, however, in the computation of depreciation particular units are seldom considered. Depreciable property is nearly always classified into not more than three or four groups, such as buildings, machinery, furniture and fixtures, and automobiles. The aggregate cost or appraised value of each of these general classes of property is usually depreciated at average rates. As depreciation is at best an estimate, any reasonable grouping of property for depreciation purposes is likely to afford as nearly accurate results as it is usually practicable to obtain, especially if attention is given periodically to the relation of the accrued depreciation to the corresponding values subject to amortization.

When average rates of depreciation are thus employed it is inevitable that some units will be under-depreciated and others over-depreciated at the time of their retirement. It seems, therefore, that when an average rate is employed, and it appears to be reasonable, if a unit of property is retired, for ordinary causes—not on account of obsolescence, inadequacy, or casualty—in advance of the average estimated life of all the units in its class, any deficiency in the provision for depreciation of that unit may be considered to be offset by excessive depreciation of other units in the same class, and for that reason it is not necessary to write off such a deficiency. If depreciation is credited to a reserve, the entire book value, less salvage, may be charged to the reserve; if depreciation is credited directly to the asset account no entry need be made. This latter may seem to contradict the previous statement that the asset account should be cleared of all property retired; but it is maintained that such has in fact been done through the excessive credits to the account for depreciation of property still in service.

The same result as the above would be accomplished by adjustment of the depreciation accrued on all the units still in service at the time of the retirement of any unit, provided the average rate proved to be reasonably accurate. Such adjustment, however, is usually impracticable. Losses on premature retirements necessitated by casualty, obsolescence, or inadequacy should, of course, be written off, as should also losses on specific pieces of property held as outside investments or for resale.

When property which has been appreciated by a credit to a special surplus account is retired at a loss, which is written off, the special surplus account should be charged, and profit and loss credited, with the amount of the loss up to the amount remaining credited to special surplus with respect to the unit retired. As an illustration, if a machine were appreciated from \$1000 to \$1500, then depreciated to \$900, and finally sold for \$500, there would be a loss of \$400, of which \$100 (net) would be chargeable to profit and loss and \$300 to special surplus, the latter representing the appreciation of \$500 less the proportion of depreciation charged to the account, \$200.

CHAPTER XIII

ASSET ACCOUNTS—Concluded

Intangible Capital Assets.

The class of assets designated generally as intangible capital assets includes all such items as good-will, patents, trade-marks, copyrights, franchises, formulæ, processes, leaseholds, and sundry rights, privileges, and concessions, whether held under the authority of the original grantor or under some form of licensing or sub-licensing agreement. Mining, timber, and similar rights, which might be included in this category, have already been discussed, for convenience, in the next preceding chapter. Organization and similar expenses are discussed later in this chapter under the head of Deferred Charges.

The values at which intangible capital assets should be carried are often subject to radical differences of opinion, so that an auditor's attempt to verify them is usually less satisfactory than for any other class of assets. However, as these assets are never considered as a basis for credit, the differences of opinion regarding their valuation tend to relieve the auditor from responsibility concerning them. It is generally recognized that values have been placed upon intangible assets in many cases merely to balance the par or stated values of capital stock, and the investing public has become incredulous, to say the least, of any such values. As long as the items are clearly shown in the balance sheet any interested person is notified that detailed investigation should be made before any conclusions are formed regarding their actual values.

Notwithstanding these conditions, it is incumbent upon the auditor to protect the interests of the present and prospective investors in the business as far as possible in connection with the valuation of all assets and the proper statement of the results of operations, which are affected by such valuations. In attempting to do so he can only apply well recog-

nized accounting principles, with such adaptations as seem appropriate in the particular case.

There are two features which are common to all intangible capital assets and which should engage the attention of the auditor; namely, the original valuation and the method of amortization, if any. These will be discussed under the heads of the several general classes of items.

Good-will.—Very broadly, good-will has been defined as the value attaching to the probability that old customers will continue to resort to the old place. Succession to a well established, profitable business undoubtedly has an asset value. The same may also be said of continuance of such a business, but the creation by a going concern of an asset valuation for good-will, or for any similar asset, should be deprecated on the ground that no good purpose is served thereby; the asset would be nothing more than a book account which could not be realized upon unless the business was disposed of, and the resulting book credit would be subject to improper use or at least be likely to be misunderstood. Little harm can be done, however, even if no good is accomplished, by a corporation's setting up such an asset on its books and paying a stock dividend of the same amount. In any event, the credit resulting from the valuation should be to a special surplus account.

Generally speaking, then, good-will should be recognized only as a purchased asset. Although we are concerned with the auditing of transactions already consummated, it may not be amiss to consider briefly the method of valuation of purchased good-will. There are many methods, and none that may be regarded as standard. The price to be paid is a matter of negotiation between the buyer and seller and is somewhat conditional upon the character of the consideration to be given; that is, whether payment is to be in cash or in securities of the buyer.

In fixing a price for good-will, prospective earning power is the prime consideration. It is obvious that no greater price will be paid than the buyer is willing to invest or risk in the hope of securing a return, be the chances ever so speculative. The amount paid for the good-will is, therefore, the capitalization of the expected return of income for a certain period in excess of a reasonable rate on the investment in the net tangible assets acquired. The prospective purchaser of

a business will form an opinion regarding the probable income to be derived from it, and must then agree with the seller as to the number of years for which the excess of such income over that representing a fair return on the net tangible assets will be paid for. The amount agreed upon may range from such extremes as paying for five years of such excess income outright, a comparatively small amount, and capitalizing the excess income for ten years, a very large amount. To exemplify this, let it be assumed that the excess income is estimated at $30,000 a year; under the first plan $150,000 would be paid, and under the second, $5,000,000, or $300,000 capitalized at 6%. Sometimes the price paid for good-will is equivalent to two to five years' total income, without deduction for the amount regarded as return on the investment in net tangible assets.

In the case of corporations, good-will usually arises in connection with the issuance of capital stock as consideration for the purchase of a business. Fortunately for the investing public, the growing practice of issuing capital stock without par value is eliminating the inflation of values of intangible capital assets by removing the necessity of placing arbitrary values upon the stock issued therefor.

As to the amortization of a valuation placed upon good-will, it seems that nothing need be done unless the concern is desirous of being very conservative in its accounting, when the cost may be written off over a period of from five to ten years. As a general rule, if the concern makes a fair income return on its capitalization the good-will value is justified, and if not, there is usually no income available against which to write off the asset. It would be futile to create a deficit by amortization of good-will. The United States Treasury Department takes the position, in connection with taxes, that good-will is not subject to amortization.

Patents.—A patent represents the exclusive right to benefit from an invention during a certain term, which in the United States is seventeen years. It follows, then, that whatever value a patent may have ceases at its expiration, if not sooner. To be sure, a patentee may build up a profitable business in a patented article which may continue after the expiration of the patent, even though others may have exercised their right to utilize the invention; but any intangible value there may

be after the expiration of the patent is properly assigned to good-will.

It cannot be assumed that the value of a patent continues until its expiration; on the contrary, it may never have any value. It is valuable only if the article can be manufactured and sold at a profit or if the patent can be assigned or rights thereunder granted for a consideration. Unless some of these conditions exist within a reasonable time after the patent is secured it may be assumed that it is valueless and its cost should be written off.

If a patent is utilized its cost should be amortized over the expected period of utility. If there is reason to believe that its value will continue until expiration it should be amortized proportionately over each of the seventeen years, or if the manufacture and sale is seasonal or otherwise irregular, be amortized upon a unit basis in accordance with advance estimates of production. If the patent becomes obsolete before expiration, through improvements covered by other patents, the remaining cost should be entirely written off, except that the cost of the original patent may be considered as part of the cost of a superseding patent held by the same concern. It is incumbent upon the auditor to inquire into the conditions with respect to the intrinsic value of each patent, unless the book value is negligible.

As has been stated in connection with good-will, the value at which a patent is originally carried should represent its cost, as no good purpose is served by capitalizing it at a larger amount. The cost of a patent to the patentee may comprise material and labor expended in experimental work, together with related overhead expense, and legal, drafting, traveling, and other expenses incurred in connection with the presentation of the claim. It may in some cases be proper to include in the cost any expenses incurred in litigation on account of infringement, but as a rule such expenses should be written off as incurred.

In a first audit, the auditor should inspect the original letters patent or the assignments thereof. It seems unnecessary to do so at every audit.

Trade-marks.—Whatever value may be regarded as attaching to a trade-mark is closely analogous to good-will, as both represent the value of an established business and both

become valueless unless the business is continued in the same manner. There is a further similarity in that there is virtually no direct cost in the creation of the value inherent in either of them, although both may have been acquired at great cost for advertising and other sales promotion expense.

It is seldom that a separate valuation is placed upon trade-marks acquired; whatever consideration is paid for them is almost always comprehended in the amount paid for good-will. Whatever value a trade-mark may have lies in the protection by the courts of the right of the originator to use it, under either common or statutory law. Such a right is different, however, from that inherent in a patent in that the right to a trade-mark is perpetual, or virtually so, and is of more general significance in the sense of an intangible value than is that of a patent. Further, the valuation of trade-marks is not subject to amortization, except as it may be amortized in common with good-will, although the value of trade-marks, and of the business in general, may, of course, decline. For these reasons it seems that no harm can be done by combining good-will and trade-marks in the accounts, as one asset, whereas patents should always be segregated.

Copyrights.—The term of a copyright is twenty-eight years, with the privilege of renewal for another period of the same duration. It is very seldom, however, that the demand for a copyrighted publication justifies carrying as an asset any part of the cost for even a considerable part of the period for which protection will be granted. The cost of the copyright should usually be written off against the first edition or printing of a publication. In any event, the book values of copyrights should be carefully reviewed periodically in the light of the probability of continued demand for the publication.

The cost of a copyright is nominal unless it has been purchased from another. There is seldom any question as to the actual existence of the copyright, so that the auditor need not usually concern himself in that regard.

Franchises.—A franchise is an operating privilege granted by a municipality or other governmental unit. It may be for a stipulated period or perpetual, but in perhaps most cases is the former. The same considerations apply to a franchise as an asset of a public service company as have been stated

with regard to good-will as an asset of an industrial concern, with the exception that the cost of a franchise for a stated term is subject to amortization.

The auditor should inquire into all particulars regarding franchises, including the period covered and any restrictions and requirements. In addition to facts bearing upon the valuation and amortization of the franchises, such inquiry may result in important disclosures such as the right of the municipality to acquire the property at the expiration of the franchise; fees to be paid; unusual requirements as to service to be rendered or the upkeep of the property; and restrictions as to rates to be charged.

When the franchise is for a stated term, the cost should be amortized over that period. As in the case of depreciation of physical assets, there are various ways of amortizing franchise values. While no invariable rule can be established, the straight-line method of equal apportionment of the amortization charge over the several years of the period will generally be found satisfactory. There is, of course, no objection to writing off the cost of a franchise prior to its expiration, but the tendency is toward lack of conservatism rather than ultra-conservatism. It may be stated in this connection that in many, if not most, States public utility companies are now controlled in all such matters by governing commissions. This fact does not, however, prevent a professional auditor from expressing his opinion upon any matter that may come to his attention during an audit.

Formulæ and processes.—The foregoing remarks on the subjects of good-will and trade-marks apply also to the valuation of secret formulæ and processes. There is a particularly close analogy between such assets and trade-marks, and it seems unnecessary to repeat what has been said on that subject.

In the rare event of payment having been made specifically for formulæ and processes, it may be possible to revalue the asset to give effect to changing conditions; but it will be found that such assets are virtually always created on the books in combination with good-will, and that any particularity in the designation of the account is only for the purpose of expressing the thought that the intangible assets acquired were more than the general good-will of the business.

Leaseholds.—The only occasion for valuation of a leasehold is where the provisions of the lease are so advantageous to the lessee that he or his assignee can afford to pay a lump sum in advance as a premium for the lease. The premium paid would be the valuation of the leasehold. This sort of transaction is limited to long-term leases and should not be confused with ordinary advance payments of rentals, although the accounting treatment with respect to amortization is no different.

The same principle usually obtains with respect to leaseholds as with the other classes of intangible assets discussed; namely, that any asset valuation should represent cost. There is occasionally, however, a case where it may be desirable to set up a value for an advantageous lease, on account of the effect of a comparatively low rental upon operating expenses. As has been stated in Chapter XII as applying to revaluation of physical properties and depletion and depreciation thereon, it is sometimes desirable to appreciate properties in order to increase the amortization thereof included in operating expenses and thus equalize costs for comparison with competing or allied concerns. The same may apply to rents, but an auditor should be cautious in recommending the procedure.

Proper valuation of a leasehold is the present worth of an annuity of the difference between the amount of rent to be paid and a larger amount which could be paid profitably or for which the premises are or could be sub-leased; in other words, the capitalization of the expected income or saving in expenses. If a leasehold value has been written up, and not paid for, the amount should be credited to a special surplus account, which should be charged periodically, through a credit to profit and loss, with the amount included in expenses as additional hypothetical rent or, where the property is subleased, with the amount of the actual income from the lease for the period, representing the excess of rent received over that paid together with any other related charges.

If the leasehold valuation represents cost, it should be amortized pro rata over the term of the lease, regardless of whether or not the computation of the cost involved consideration of compound interest.

Sundry rights, etc.—It is thought that the principles enunciated in the foregoing discussions of specific classes of intangi-

ble capital assets may be readily applied to any special classes that an auditor is likely to encounter. For example, moving picture rights are subject to the same principles of valuation and amortization as copyrights; that is, their value is conditional upon the probable output of the article.

Treatment in the report.—As already stated, it is desirable that the valuations of intangible assets be shown in the balance sheet separate from those of physical properties. Such general designations as "Property, plant, and good-will" should be avoided. It is also desirable to separate patents, copyrights, and similar specific assets which are subject to amortization, from the more general intangibles such as good-will.

Though amortization of intangible assets may be credited on the books to reserve accounts, the amounts should be deducted from the corresponding assets in the balance sheet, the deductions being shown if desired. Any considerable additions to intangible asset accounts during the audit period should usually be commented upon in the report.

Deferred Charges.

The group of asset accounts to be considered now is variously designated as deferred charges, deferred assets, deferred debit items, deferred charges to operations, deferred and suspended debits, and perhaps otherwise. As a concise but comprehensive term, deferred charges will be found generally satisfactory.

The group comprises expenditures applicable to future operations, which, generally speaking, have a value only to a going concern; charges held in suspense pending determination of their proper disposition in the accounts, as to whether they are to be treated as assets or expenses; and accounts receivable and similar assets the realization of which is doubtful. Some accountants also include in this group expense materials such as fuel, repair parts, and stationery, but the author prefers to differentiate between tangibles and intangibles and assign expense materials to the same group as other materials.

As it is difficult in some cases to clearly distinguish between items of the first two classes cited above, and as no benefit would be derived from detailed classification along those lines,

all the items usually included in deferred charges are stated as follows:

- Unexpired insurance.
- Prepaid interest, taxes, rent, royalties, advertising, etc.
- Unamortized debt discount and expense.
- Cost of removing overburden in mining operations and similar advance expenditures.
- Unamortized improvements to leased property.
- Unamortized organization, preliminary, development, and experimental expenses.
- Deposits with public utility companies, mutual insurance companies, etc.
- Doubtful accounts and notes receivable.
- Merchandise of doubtful marketability.
- Payments of claims, etc., which may be recovered from others or may be written off.
- Property expenditures which may be capitalized or treated as repairs or replacements.
- Unadjusted differences in accounts and similar items subject to investigation pending final classification.

The auditor is called upon to exercise considerable judgment and discrimination with regard to the apportionment between periods of charges for insurance and other expenses, involved in the subject of deferred charges; and, conversely, the apportionment of income involved in deferred credits; as well as accruals of income and expenses involved in accrued receivables and payables. It can be asserted with very little fear of contradiction that most auditors devote an inordinate proportion of their time to the precise computation of accruals and prepayments and in the adjustment of the accounts to conform thereto. Such items are usually the least important of any in the balance sheet, and they should be dealt with accordingly.

Under ordinary conditions, that is, where there is no necessity for extreme precision in stating the assets and liabilities and the results of operations—as there might be in the case of the sale of a business or the retirement of a partner—the auditor should not undertake to compute and set up the proportions of expenses prepaid unless it is done on the books. There may be exceptions to this, as where considerable

amounts are involved and the omission to recognize them in the accounts is inadvertent or through ignorance, but in any case where the client is informed of the principle and prefers not to recognize it, and it appears that no interests will suffer thereby, the auditor should not insist upon adjustment being made in the accounts or in his report. It is in order for an auditor to qualify his report, in a foot-note to the balance sheet or in the comments, by a remark to the effect that, in accordance with the custom of the concern, certain accruals and deferred items have not been considered.

If the items are to be considered, there is usually no necessity for absolute precision in determining their amounts. When computations have been made by the office force they can almost always be checked or tested, with a view to determining their approximate accuracy, with comparatively little effort. Any differences disclosed should not be adjusted unless they are really material to a proper statement of the financial condition and operations, having regard to the purpose for which the audit is being made. Such differences may, of course, be commented upon in the report. It follows that when it is necessary for the auditor to make the computations himself he should be satisfied with approximate accuracy and not devote the time necessary to obtain absolute precision.

Subject to the foregoing general remarks, the items comprehended in deferred charges will now be discussed in more or less detail.

Unexpired insurance.—For a going concern, it is proper to apportion the cost of insurance pro rata over the term of the policy, regardless of the fact that the rebate to be made upon cancellation of the policy would usually be based upon a "short rate." In the case of marine insurance the cost should, of course, be charged against the voyage, and no unexpired proportion should be considered. As to other insurance, particularly fire insurance, for which inducements are made to extend the term of policies beyond one year, it is usually necessary to compute and set up as a deferred charge the unexpired proportion of premiums paid in order that each accounting period will be charged with the expense properly applicable thereto.

The question is sometimes raised as to whether premiums paid for fidelity and surety bonds, and the like, should be

deferred in the same manner as fire insurance premiums. The answer to this and similar questions depends largely upon the length of the accounting period and the relative importance of the amounts involved. If the accounting period is a year and the premiums are annual there is nothing to be gained by deferring part of the premiums unless the amount involved is very large, and even then the expenses of only the first year would be affected. The necessity of spreading the expense increases in direct ratio to reduction in the length of the accounting period.

With respect to life insurance premiums, if they are to be treated as expenses there is no reason why the premium for a year should not be spread over that year in the same manner as any other insurance expense. If, however, the premiums or part of them are to be treated as assets the unexpired proportion should usually be ignored. For extended comments on the subject of life insurance see Investments, Chapter XI (page 201 *et seq.*).

As to liability insurance, such as workmen's compensation insurance, there is as likely to be an accrued liability as a deferred charge. The advance premiums for such insurance are usually based upon the estimated pay-roll for the year and are subject to adjustment at the end of the year in accordance with the actual pay-roll. The amount paid in advance or accrued at any intermediate date is determined by applying the rate of premium to the expenditures for the particular class of salaries or wages from the date of the policy, without regard to the proportion of the term which has elapsed.

When insurance is carried with mutual companies it is customary for a comparatively large initial payment to be made and for the greater part thereof to be returned or credited by the company at the end of the period. If the amount to be refunded in one way or another can be predetermined with reasonable accuracy it should be regarded as a deposit, whether or not carried in a separate account, the remainder being written off over the period as expense. If the whole payment is absorbed as expense there will be a large credit adjustment at the end of the period.

The computation or checking of the unexpired proportion of insurance premiums affords a convenient opportunity to obtain information regarding the insurance protection carried

by the concern. With some allowance for difference of opinion with respect to some classes of casualty insurance, and use and occupancy insurance, the auditor is usually in a position to determine whether or not the business is adequately insured, especially if the buildings and equipment have been recently appraised. In general it may be said that fire insurance should be carried to the extent of at least 80% of the sound value of the plant and merchandise, as most policies carry an 80% co-insurance clause. The auditor should make a note in his papers of the amount of the various classes of insurance carried and should usually comment on its apparent adequacy in his report.

Some concerns take out insurance policies to cover specific risks and cancel them later. When this is done to any extent the auditor should see that credit has been received from the insurance brokers for refunds on cancellations.

In the verification of insurance carried and of the unexpired proportion of premiums it is usually desirable to examine the policies themselves, but this is not indispensable. The charges for premiums may be verified by reference to vouchers, and the insurance record maintained may be well kept and appear to be reliable for all purposes. The policies may in fact be held by a mortgagee. The extent to which the examination need be carried to original sources depends upon the availability and apparent reliability of the detail records maintained.

Prepaid interest, taxes, etc.—The verification of such items as prepaid interest, taxes, rent, royalties, and advertising involves examination of the related expense accounts and, in the case of interest, of the accounts representing interest-bearing indebtedness. In a complete audit the prepaid proportions will be developed in the routine procedure of examination of the expense accounts, but in a balance sheet audit it will be necessary to make specific examinations of any such accounts as it is thought may include expenditures applicable to future operations.

All such prepayments should be computed upon a proportional time basis; that is, according to the term covered by the charge. Taxes should be apportioned over the tax year, although it is often difficult for the auditor to readily ascertain what that is, on account of vagueness in the wording of tax bills.

Apportionment over the tax year is exemplified in its application to the present New York State corporate franchise tax. For a going concern this tax is virtually an income tax, as it is based upon the corporation's net income for its fiscal year preceding the filing of a return. The return covering the income for the calendar year 1923, for example, is filed in July, 1924, and a tax bill is rendered and is payable in December, 1924, or January, 1925, covering the tax year from November 1, 1924, to October 31, 1925. To adopt the most conservative practice, this tax will be accrued at December 31, 1923, upon the theory that it is based upon, and should be paid out of, the income for the year 1923; but as it is literally a tax on the privilege of doing business during the period from November 1, 1924, to October 31, 1925, it is logical to regard it as applicable to that period. Accordingly, if the tax has been paid at December 31, 1924, five-sixths of the amount would properly be deferred at that date.

Unamortized debt discount and expense.—This is a commonly recognized term for the proportion of discount and expense in connection with the issue of bonds and similar securities which is deferred as chargeable against future operations. Discount and related charges should never be entirely capitalized, but should be amortized over the term of the securities, or if they are retired in advance of maturity, over their actual life. The amortization applicable to a construction period may, of course, be capitalized.

Bond discount, together with related expense, should always be regarded in principle as tantamount to additional interest on the bonds; whenever such interest is charged against the operations there should also be a charge for the discount, and when the interest ceases to be paid the discount should be completely extinguished. The deferred charge for the unamortized portion of the discount should, therefore, be only such as pertains to the bonds outstanding at the time.

There have been cases where a bond issue has been completely refunded prior to maturity, with bonds sold at a discount, without the discount on the original issue having been written off. The only possible justification for such a course would be that the cost of the refunding issue, in interest and in amortization of discount on both issues, did not exceed the rate of cost on the original issue, which would only be when

the discount or interest on the refunding issue was considerably less than on the original issue. As a general rule, whenever a bond is retired any balance of discount and expense applicable to the bond should be written off.

In addition to discount on the sale of securities it is proper to include in the deferred charge subject to amortization such expenses as commission, engraving, advertising, and fees of trustees, attorneys, and so forth, in connection with the issuance of the securities.

Cost of removing overburden, etc.—The cost of removing overburden, sometimes called stripping, in advance of income-producing operations, has been selected as typical of expenditures which are sometimes encountered in connection with mining and similar operations. Such advance costs should be absorbed in future operations upon the basis of the estimated quantities to be extracted, a unit cost being computed and applied to the cost of the quantities produced, the amount being credited to the deferred charge account.

Unamortized improvements to leased property.—Any expenditures for improvements or alterations to leased property, including immovable fixtures installed therein, should be written off over the term of the lease. If the lease is renewable at the option of the lessee, and the present intention is to renew it, there would seem to be no objection to extending the amortization over the additional period if the client so desires, but on account of the uncertainty of exercising such an option it is better to write off the entire expense over the term of the original lease.

As stated in the preceding chapter (page 225), when property is held under such a long-term lease that the useful life of improvements to the property is not expected to exceed the term of the lease, the cost of the improvements may be regarded as subject to depreciation the same as though the property were owned. In any case where the rate of amortization over the term of a lease would be approximately equal to a normal rate of depreciation on the class of assets represented by the improvements, it makes very little difference whether the improvements are carried as deferred charges or as property assets. The distinction is purely theoretical; under the former treatment effect is given to the conception that the concern has incurred an expense which may be spread over

the period during which benefit will be derived, and under the latter the improvements are treated as physical assets which are being written off as they deteriorate.

Unamortized organization expenses, etc.—Organization, preliminary, development, and experimental expenses have many common characteristics but may in some cases call for varying treatment. Preliminary, development, or experimental expenses in connection with one particular project may be carried separately, subject to determination of the success of the project, when the expenses may be capitalized as cost of a patent or process or be written off. Particular attention will be given here, however, to such expenses as are general in nature and are incurred in the initiatory stage of a business.

All such expenditures may be regarded as analogous to good-will, trade-marks, formulæ, and processes, discussed earlier in this chapter, in the sense that they may have a permanent intangible value to the business and not be subject to amortization. The remarks on amortization of good-will apply equally to organization and similar expenses.

An appraisal of the property of a public utility for rate fixing purposes will always include some amount for the cost of organization. This is logical as applied to any business. Seldom if ever can a business produce income from the day it opens its doors; it is necessarily engaged for some time in perfecting its organization and making preparations for permanently active operations. There are also necessary legal and other expenses in connection with organization. The cost of organization represented by such expenditures is undoubtedly as much an asset for a going business as the cost of its tangible property, the latter being valueless to the business as a utility without additional expenditures for organization.

The same conclusion would seem to apply to a reasonable cost of acquiring capital. It is well recognized that expense must be incurred in connection with the sale of capital stock. When the stock has no par value, or the laws of the State in which the company is incorporated permit the sale of stock with par value at a discount and the setting up of the stock in the accounts at the amount received, which is tantamount to the stock's having no par value, it is usually unnecessary to consider the charge of stock-selling expense as an asset because it is deducted in stating the capital liability. It makes very

little difference, however, from the standpoint of the stockholders, whether, on the one hand, the amount paid in by them is reduced in the stated capitalization of the company by the expenditures incident to the selling of the stock; or, on the other hand, the entire amount paid in is capitalized and is partially offset in the accounts by the amount of stock-selling expense.

These remarks should not be construed to mean that there is no virtue in capital stock without par value in its relation to organization expenses and other intangible assets; on the contrary, it is highly desirable for a corporation to carry as its capital as nearly as possible only the actual amount invested in the business which can be employed in the production of income, and the original purpose of legislation authorizing the issuance of stock without par value was to eliminate the abuses, commonly known as "stock watering," resulting from the necessity of balancing with assets the par value of stock issued. The point to be made here is that stock-selling expense is not essentially different from other necessary organization expenses, even in the case of stock without par value, where the former especially may readily be concealed, because all such expenditures are in fact deductions from the capital contributed by the investors in order to make it effective for the uses of the business.

It seems that the conclusion to be drawn from the foregoing is that unless organization and similar expenses can be applied in reduction of the stated capital of the business they are in the same category as good-will, in that they need not be regarded as subject to amortization unless it is desired to write them off as a measure of conservatism, to which an auditor should, of course, readily accede. If they are to be amortized, there is no established rule as to the period over which it should be done, but it may be stated broadly that the period should be from three to ten years.

It is proper to capitalize, or at least to charge to an asset account subject to future disposition, all expenses of a business up to the time when it is considered that normal operations have begun. The principle is the same as that involved in the capitalization of such expenses as interest, taxes, and insurance during a construction period, which has been discussed in Chapter XII (page 218).

When the business is that of manufacturing, there will nearly always be some goods produced during the initiatory stage at such a high cost that they must be disposed of at a loss, and other goods may have to be scrapped. At the date established as the beginning of actual operations an inventory should be taken, due consideration being given to the sale value of any manufactured goods on hand. Then all expenses and indicated losses should be charged to an appropriately designated account, and all income to that date in the form of sales, interest on bank balances, and so forth, should be credited to that account, so that the business will have a clean slate. From that time on, unless there are some very extraordinary, unforeseen developments, all expenses and losses should be charged to profit and loss.

What has been said regarding the justification of capitalizing development expenses should not be construed as extenuation of general lack of conservatism; on the contrary, in any doubtful case the auditor should always urge the most conservative practice. The inclination of business executives is generally in the direction of magnifying the prospective value of all such expenditures.

Deposits.—Amounts deposited with public utility companies, mutual insurance companies, and the like, are frequently classified as deferred charges for the reason that they are virtually permanent and should not be treated as current assets, and the group of deferred charges constitutes a convenient repository for all such items; further, they are not unlike advance payments of expenses. There should be no objection to including in the current assets any deposits which will be returned within a reasonable time.

Evidences of all deposits should, of course, be examined; or at least it should be done in a first audit, although it may usually be dispensed with in later audits provided there has been no change in the business relations affecting the deposit.

Miscellaneous suspense items.—Included in this category are doubtful notes and accounts receivable, merchandise of doubtful marketability, and sundry items the final disposition of which has not been determined, as to whether they may properly be treated as assets or be written off. The first two classes of items are properly included in deferred charges for the reason that it is improper to include in current assets any-

thing which is thought not to be realizable at its face value; such face value will, of course, comprehend any reserve carried against the asset. The other items appear to require no other explanation than that they are questionable assets. Manifestly, nothing should be carried as a deferred charge that is known to represent an expense or loss, and the auditor should make diligent investigation of the facts in any doubtful case.

Contingent Assets.

In the broadest sense, many assets may be contingent; that is, their realization may be uncertain or dependent upon conditions beyond the control of the business. In a strictly technical sense, however, the contingency involved in contingent assets applies to the possibility or probability of the items becoming assets at all, rather than to the uncertainty of realization. Contingent assets nearly always arise in connection with contingent liabilities; that is, they represent potential sources of recoupment in the event that possible liabilities become actual.

The commonest examples of such assets are notes and acceptances discounted. If the maker or acceptor of a discounted instrument defaults in payment at maturity the endorser is called upon to pay it, whereupon the latter may claim reimbursement from the former. The endorser therefore has a contingent liability to the endorsee and a contingent asset for the same amount representing the possibility of recovery from the primary obligor. This matter has been discussed at some length in Chapter VIII in connection with notes and acceptances receivable discounted (page 114 *et seq.*). The same principles there enunciated apply to accounts receivable sold with a guaranty as to collection.

Other fairly common contingent assets arise in connection with accommodation endorsements and guaranties of bonds, et cetera, of other companies. In nearly all cases where the potential liabilities under such endorsements and other guaranties become actual, there is at least some possibility of recovery from the parties originally benefited by the guaranties, and the amounts involved are contingent assets as well as contingent liabilities.

There may be other items which may properly be treated

as contingent assets, such as a claim which may possibly be enforceable, but it seems well to restrict contingent assets to items which are offset by contingent liabilities. An asset which is doubtful of realization may be set up in the accounts if desired but with a reserve of equal amount against it, thus serving the same purpose as treating it as a contingent asset.

Some accountants favor treating property held for others, such as merchandise held on consignment and equipment held under lease, as contingent assets, with corresponding contingent liabilities, but the author does not favor showing such items in the balance sheet at all. Unless property belonging to another is properly protected from loss there may in fact be a liability for its value but there will be no asset in the event of the necessity of indemnifying the owner for a loss.

Contingent assets and contingent liabilities may be expressed in the body of the balance sheet as contra items or may be shown in a foot-note, but they should never be ignored. As stated in the discussion of notes and acceptances receivable discounted and accounts receivable sold with a guaranty, it is sometimes desirable to overlook the contingent character of the assets and the liabilities and treat the items as current.

CHAPTER XIV

LIABILITY ACCOUNTS

The term "liability accounts" as used here is intended to comprehend all accounts which are commonly stated on the "liabilities" side of the balance sheet, including some that are not literally liabilities but are generally so classified for convenience. Some accountants and writers on accountancy are greatly concerned over the distinction between liabilities and capital in relation to designations in balance sheets. It is, of course, necessary for an accountant to have a clear perception of the difference between these two classes of credit accounts, but in the author's opinion simplicity in financial statements, and in accounting terminology generally, is extremely desirable, especially when it can be attained without serious violence to principle; and for that reason he is not disposed to split hairs between "liabilities" and "capital" in the designation of the general class of accounts represented.

Turning for the present to the consideration of pure liabilities, as distinguished from capital and reserve accounts, the principal point to be determined is whether the liabilities are all stated. This is at least as important as the determination of the existence and proper valuation of the assets. An auditor is virtually wasting his time in the examination of liability accounts if he does not constantly have in mind the possibility of there being other liabilities not shown in the accounts; there is little likelihood of the recorded liabilities being materially overstated.

In the following discussion the means of determination of all the common classes of liabilities will be considered. It is thought that any varieties which may be encountered in an audit but are not specifically mentioned will be covered by close analogy. Bank overdrafts have been discussed in connection with cash on deposit, in Chapter VII.

Notes and Acceptances Payable.

The class of liabilities to be considered here is that of direct obligations on notes and acceptances. Liabilities arising from endorsements will have attention later. Notes and acceptances are combined for the reason that there is no essential difference between them, at least from the auditing standpoint.

In a complete audit the credits to the general ledger account or accounts should be examined or tested for the purpose of determining that there is no irregularity in passing credits to offset charges which have been made in order to conceal misappropriations of cash. The propriety of the charges will be tested by the examination of the entries and postings for cash disbursements.

A schedule should be prepared from the records showing as to each instrument the date, payee, maturity, amount, interest rate, date to which interest has been paid, if any, and security, if any. Loans from depositary banks, together with any collateral thereto, will be certified by the banks in connection with the verification of cash on deposit. It is usually desirable to obtain certification of other loans as well, especially if there appears to be any possibility of additional unrecorded loans having been made from the same individual or concern. Requests for certification of loans should usually call for the lender's stating the amounts. Collateral loans should always be confirmed, but where the verification of the security is the prime consideration there should be no harm in stating the details for verification by the lender and pledgee.

It is generally unnecessary, and in fact futile, to obtain confirmation of trade notes and acceptances unless the concern regularly has a number of such instruments outstanding in favor of one payee, when it might be possible to perpetrate fraud, without being detected, by either passing through the records a fictitious liability for later fraudulent payment—which should, of course, be detected in the examination of the ledger account—or by showing in the records that an item had been paid when the cash was misappropriated. Unless some such condition as this is present nothing is gained by establishing through independent evidence that the trade

obligations of record are in fact payable. It is manifestly impracticable to circularize all the concerns to which notes or acceptances might have been given in order to determine that all such liabilities have been recorded. In the absence of fraud, the possibility of failure to disclose trade liabilities after a thorough examination of the accounts payable records, as discussed later, is rather remote.

An additional means of verification of interest-bearing indebtedness is found in the interest account. The charges to that account should be analyzed for at least a considerable part of the period and the names of the recipients of interest should be found to be represented in the corresponding liability account or the liability be determined to have been discharged. Unless the interest payments apply to indebtedness which is to be confirmed, notably bank loans, it is usually desirable also to check the amount of the interest with the amount of the liability. This will usually be done in any event as to liabilities outstanding, in connection with the computation of accrued interest payable and interest paid in advance.

Corroborative evidence of loans, and sometimes of other obligations, may usually be found in the minutes of directors' meetings of a corporation. This source of information cannot, however, be relied upon in all cases as many boards of directors are lax in formally authorizing or ratifying such acts of the officers, or of recording their approval.

Notes and acceptances payable should be classified in the balance sheet, or in a supporting schedule of the report, as to those secured and unsecured and those representing loans and trade obligations. Any considerable amounts due to officers, stockholders, employees, or affiliated companies should usually be shown separately, especially in a report intended for bankers, as outsiders are interested in knowing whether any preferential payments are likely to be made in the event that the concern finds itself in financial difficulties. Unless such a long time has elapsed between the date of the balance sheet and that of the report that the information has no practical value, the report should usually contain at least a summary of the maturities of the obligations. Past-due items should be mentioned in any event.

Discounted Notes, Acceptances, Etc.

The treatment of discounted and assigned customers' notes, acceptances, and accounts has already been discussed under the head of the respective asset accounts. If there is every reason to expect that the customers will meet their obligations it may be considered that there is only a contingent liability—and corresponding contingent asset—on account of the discounting transaction, but if any customer is in default the amount received in the discounting of his obligation should be treated as a direct current liability.

The conditions are virtually the same with respect to unaccepted drafts on customers which are wholly or partly realized upon by discounting with a bank. Under ordinary conditions a bank will not discount a draft unless it is accompanied by documents enabling the bank or its correspondents to control the goods shipped until the draft is paid or accepted, and even then the bank will frequently advance only about 80% of the amount of the draft. The conservative practice in such cases is to treat the amount advanced as a current liability, and the amount of the charge against the customer as a current asset, pending settlement of the transaction, but unless there is some uncertainty regarding the acceptance of the goods and payment of the draft by the buyer, such as usually exists in a declining market, it may be proper to regard the amount received as a contingent liability and the equivalent as a contingent asset, any uncollected balance being treated as an account receivable from the bank.

As to all items of discounts such as have been cited in the foregoing, the source of the auditor's information will be the detail records of notes, acceptances, and drafts or the analyses of the respective ledger accounts. These records should always be supplemented and confirmed by certifications obtained from the discounting financial institutions.

Trade Accounts Payable.

The class of liabilities to be discussed here is generally that of obligations on open account for purchases and expenses. The division of accounts payable which has been made for the purpose of discussion is based upon differences in accounting

and auditing procedure rather than precise definition. Liabilities for taxes, salaries and wages, and the like, are literally not trade accounts but are virtually always included in that class as distinguished from sundry accounts arising from other than ordinary business transactions.

Trade accounts payable may be carried in individual accounts in the general ledger but in nearly all cases the preferred method is to carry only a controlling account in the general ledger and the details in a subsidiary record. This record may be a ledger for the individual accounts or merely the voucher record (by whatever name it may be called), so designed as to show the outstanding items at any time. Under ordinary conditions, and especially when partial payments are not made, the latter method is to be recommended. The controlling account may be designated as Accounts Payable, Vouchers Payable, Audited Vouchers, or otherwise.

There are, of course, some concerns whose accounts are kept upon a cash basis with respect to purchases and expenses. It may be entirely proper for a non-commercial institution consistently to disregard comparatively small liabilities of that character, but the practice is never justified in the case of a commercial business. Some concerns do not recognize accounts payable throughout their fiscal period but determine such liabilities and take them up in the accounts at the end of the period, reversing the entry at the beginning of the next period. The auditing procedure in such cases is not essentially different from that to be outlined, which is predicated upon the assumption that the accounts are designed to show the liabilities at all times.

Examination of general ledger account.—In a complete audit the entries, both credit and debit, in the general ledger account or accounts should be examined or tested. This will ordinarily be done in connection with the verification of the records of purchases and cash disbursements, which have been discussed in Chapters IV, V, and VI. As to the credits, it is important to determine not only that all liabilities are shown but also that those shown are legitimate, and unless the credits resulting in the balance are subjected to examination there can be no assurance that fictitious credits have not been passed for the purpose of disbursing the money fraudulently.

As to the debits, it must be determined that the reductions

of the liabilities shown by the ledger are genuine by tracing them to the original records which have been audited. When there is a controlling account in the general ledger and detail accounts in a subsidiary ledger the postings to only the former need to be checked. The principle is the same as that involved in the relation between the accounts receivable controlling account and the supporting detail accounts, discussed in Chapter IX (page 124).

Examination of detail records.—When the details are not contained in the general ledger itself, in one or more accounts, it is necessary to determine that the aggregate of the balances shown in the subordinate record is in agreement with the amount shown by the general ledger account. As previously stated, the details may be kept in a ledger or in the voucher record.

When an accounts payable ledger is kept the procedure is practically identical with that described in Chapter IX with respect to the subsidiary ledger for accounts receivable, referred to above. It is seldom necessary to keep a record in the audit working papers of the details of accounts payable, other than the totals of credits and debits, unless it is contemplated that a schedule of the accounts will be included in the report; therefore the client's trial balance, in whatever form, should be used if available. The footings of the accounts and computations of the balances should be verified sufficiently to determine the identity of the balances as representing certain items, in whole or in part.

If the details of the accounts payable are contained only in the voucher record, the open items should be listed and footed, using the client's schedule if possible. This work may frequently be facilitated by taking the totals of certain pages of the voucher record *en bloc* instead of listing each item.

Regardless of the form of the detail record, old items should be noted and inquiry made as to why they have not been paid. It may be that they have been paid and the cash erroneously charged, or that they are not in fact liabilities and should be written off. If there is any considerable amount of past-due accounts the matter should be covered in the report, either by separate classification of such accounts in the balance sheet or by mention in the comments—usually the latter.

As has been stated with respect to accounts receivable, if the aggregate of the detail balances is not in agreement with the controlling account the auditor should use his judgment about proceeding to locate and adjust the difference. If the amount of the difference is nominal the matter may be ignored or be mentioned in the comments of the report, but if it is considerable the client should usually be consulted before any extensive work is done in that direction. If the detail balances are greatly in excess of the controlling account, and it appears that the items constituting the former are actual liabilities, it may be desirable to set up a reserve for the difference pending investigation and adjustment.

Debit balances contained in the accounts payable which are not offset by credit balances in favor of the same individuals or companies should be treated as miscellaneous accounts receivable or as advance payments on purchases, so that the actual liabilities will be shown. It is sometimes desirable, however, to dispense with this adjustment, if the amount is comparatively small, for the purpose of maintaining agreement with the client's balance sheet.

Liabilities not recorded.—Perhaps the best means of learning whether all liabilities are recorded as of the date of the balance sheet is to ascertain whether any other items applying to the period ended on that date have been paid or taken up as liabilities subsequently. In that respect, it is desirable when practicable to make the audit considerably after the date of the balance sheet.

Before proceeding to discuss the various methods of investigation for the purpose of ascertaining whether all accounts payable have been recorded, it seems appropriate to consider whether all bills received from creditors should in fact be regarded as liabilities. There are two matters upon which accountants sometimes disagree among themselves and with business men; namely, invoices for goods in transit and invoices for goods purchased by some kinds of business concerns for the succeeding season's requirements. Both these subjects have been discussed at some length in Chapter X in connection with inventories (pages 172 and 155, respectively) and it seems unnecessary at this time to do more than repeat the author's conclusions.

There can be no objection on the part of an auditor to the

inclusion in accounts payable of invoices for goods in transit, but, in the author's opinion, an auditor should not insist upon their being included. This opinion is based upon common business practice, which is that invoices are not recognized as liabilities until the goods have been received and accepted as satisfactory.

With regard to post-dated invoices representing purchases for the next season, it is fairly generally recognized that no harm can result from their exclusion from the liabilities provided the invoices are not due and the fact of their omission is stated in a foot-note to the balance sheet. It is necessary, however, to investigate the status of such shipments of goods thoroughly, in order to ascertain that the goods have neither been sold nor included in the inventory.

Examination of bills on hand.—Whether the audit is made promptly upon the closing of the books or later, the unentered bills on hand should be inspected and any that are applicable to the period under audit should be investigated. Sometimes a record of incoming bills is kept and the auditor may select a few comparatively large bills received toward the end of the period for tracing into the voucher record; or the bill record may show the date of entry in the voucher record, when, if the entry is in the succeeding period, the voucher should be examined for evidence as to the date of the receipt of the goods or services.

The burden of proof that a bill which was on hand at the date of the balance sheet was not actually a liability at that date is upon the concern whose accounts are being audited, subject to due allowance being made for time obviously needed for the transportation of goods. If there is any doubt regarding the date of receipt of goods, the receiving records, if there are any, should be inspected. It is often desirable also to ascertain whether the goods are included in the inventory.

When the concern pays invoices before the receipt of the goods in order to avail itself of cash discounts, the invoices may or may not be entered as credits to accounts payable at the time of payment; if they are not, there will usually be resultant debit items in the detail balances of accounts payable, which should be treated in the balance sheet as goods in transit or advance payments on account of purchases, not as

accounts receivable. As a matter of bookkeeping, it is preferable not to enter the invoices as purchases in advance of the receipt of the goods, because when that is done there is danger of failing to include the goods in the inventory.

Examination of subsequent entries.—If at the time of the audit any entries of purchases and expenses have been made under date subsequent to that of the balance sheet—say within a month or two—they should be tested to ascertain whether any are applicable to the preceding period. The extent to which this and similar tests are carried depends, of course, upon the relative amounts and number of items involved.

It is very seldom that absolutely all items of liabilities are determined and taken up as of any date; and it is not usually of great importance that they be, especially for a going concern. It is, however, necessary that the liabilities be stated with approximate accuracy, the latitude which should be allowed depending upon the size of the business. The only general rule that can be given is that, under ordinary conditions, if the aggregate of small bills found by subsequent examination not to be taken up is relatively negligible they may be ignored. This should not be construed as condoning laxity in recording liabilities; on the contrary, any tendency in that direction should be criticized: it merely means that the auditor need not usually devote any considerable amount of time to the discovery and adjustment of small amounts of liabilities which have not been recorded in the proper period. All outstanding items of relatively large amount should be investigated.

Confirmation.—The systematic confirmation of trade accounts payable is unusual. It is often desirable, however, to obtain confirmation of very large and active accounts. This can usually be done effectively and satisfactorily by examining the regular statements rendered by the creditors. Comparison of the balances shown by the books with creditors' statements is more easily effected when an accounts payable ledger is kept so that the amounts due to one creditor are combined, but it does not present insurmountable difficulties when the details are entered only in the voucher record. Unpaid vouchers are usually filed alphabetically and there is generally some kind of alphabetical index to paid vouchers which are filed numerically or chronologically.

If statements are not available for the accounts which are desired to be confirmed, or if there are suspicious circumstances which indicate the necessity of direct confirmation, the auditor should have the client request that statements as of the particular date be mailed directly to the auditor by the creditors. Accounts with affiliated companies or interests should virtually always be confirmed, either by examination of their books or by obtaining statements from them.

Adjustments of understatements.—What action should be taken with respect to liabilities which are found not to have been recorded is a matter for the exercise of judgment on the part of the auditor in view of all pertinent conditions. There are cases where any difference discovered should be adjusted, down to the last cent, and others where the amount involved would have to be very considerable to warrant changing the company's books or published financial statements. Most cases are somewhere between these two extremes.

As previously stated, under ordinary conditions no harm can result from ignoring comparatively small amounts of additional liabilities. Of course if that were done it would be impossible for the auditor to make an explicit assertion in his report to the effect that all known liabilities were stated, but it should not usually interfere with issuing an unqualified certificate as to the financial condition generally. As a rule, any considerable differences should be adjusted, care being exercised that the adjustment is properly applied as between inventories or other assets and profit and loss, and differences that do not seem to warrant adjustment may be commented upon in the report.

Sundry Accounts Payable.

Under this head will be considered such classes of liabilities, other than the ordinary vouchers payable or trade accounts which have been discussed, as are customarily designated as accounts payable. They embrace such items as loans payable on open account; liabilities to individuals for salaries, dividends, et cetera; customers' credit balances; customers' deposits, when they are to be returned or used shortly; and liabilities on account of purchases of capital assets, and the like, which are payable in instalments or for some other reason

are carried separately from trade accounts. The question of liabilities on uncompleted contracts for construction has been covered in Chapter XII (page 223 *et seq.*) in connection with the subject of charges therefor.

These sundry liabilities, with the exception of customers' credit balances, are usually carried as separate ledger accounts. However they may be carried in the books, they are subject to the same procedure as trade accounts payable with regard to the examination of the charges and credits. In a complete audit, special attention should be given to credits to personal accounts with officers and employees for the purpose of detecting possible fraud. The same applies to the charges to any very active accounts with officers or proprietors when it is possible for those individuals to be defrauded by an employee's charging them with cash misappropriated. The balances in such personal accounts should usually be confirmed by the creditors.

Interest-bearing accounts such as loans are usually subject to comparison with interest payments, the same as notes payable. It may also be desirable to have the balances confirmed by the creditors, especially if the accounts have been active. Loans on open account must be assumed to be payable on demand unless there is an agreement to the contrary.

In connection with liabilities to individuals for salaries and the like, in the audit of a new concern the auditor should make certain that all claims that may be made by the organizers for services and expenses to the date of the balance sheet are taken up. The same applies to unpresented bills for legal or other professional services at any time. If such claims have not been presented an appropriate foot-note should be added to the balance sheet.

The treatment in the balance sheet of customers' credit balances has been covered under the head of Accounts Receivable, Chapter IX (page 144). Customers' deposits should be treated as accounts payable if they are to be returned, or applied against sales, within a comparatively short time. Under other conditions, for example in the case of public utility companies, where the deposits aggregate large amounts, they should be carried as separate liability items.

There may be subsidiary records for personal accounts or deposits, when the procedure in that respect will be the same

as for trade accounts payable. The verification of any of these liabilities may involve reference to contracts or correspondence.

Sundry accounts payable may be shown separately in the balance sheet if the amounts are considerable or there is any other special reason for doing so, or otherwise may be combined with trade accounts in one item. Aside from the principle of consistency which dictates that the accounts payable be exhibited in the same detail as are the other groups in the balance sheet, under ordinary conditions the only important consideration with regard to the degree of detail to which the classification of accounts payable should be carried is that in statements to be submitted to banks any considerable amounts due to officers, stockholders, employees, or affiliated companies should be stated separately, as such creditors are likely to be preferred in the event of financial stringency.

When the concern is insolvent, or for any other reason it is necessary to consider the precise ranking of the liabilities, taxes and wages payable should be shown separately because of their preferential character. In doing so, care must be exercised to include all such liabilities, however they may be carried on the books. Such accounts payable as are not current liabilities should, of course, be stated as separate items.

Deposits of Banks.

It is not intended to discuss at any length the auditing of institutions such as banks, trust companies, and building and loan associations, but the deposits of banks will receive some attention as typifying a general class of liabilities.

The aggregate of the detail balances as shown by the subsidiary records should be found to be in agreement with the corresponding general ledger accounts. There is usually such a large volume of transactions and such a great number of accounts that it is impracticable to examine completely the charges and credits to either the controlling or detail accounts. The footings of the controlling accounts may be verified but it is usually futile to undertake to do so with the detail accounts.

Any fraud that may be committed will be through failure to credit a deposit received or in charging a withdrawal that

has not been made. Inactive accounts are almost always selected for either of these purposes. The only practical way to detect fraud or errors, except differences between the controlling and detail accounts, is to have the depositors confirm the balances.

When this is done, which is only by special arrangement, it is necessary to issue a call for pass books, if they are used, and have them balanced and returned under the supervision of the auditor; or if statements are used, for the auditor to check the balances and send or deliver them to the depositors himself. The form of confirmation employed is usually a negative one, such as has been described in connection with accounts receivable in Chapter IX (page 129 *et seq.*), calling for advice by the depositor to the auditor only in the event that discrepancies are discovered after the account is reconciled (except as to savings accounts, when no reconcilement is necessary). The positive form of confirmation is sometimes employed but is usually regarded as impracticable from the standpoint of expense.

Perhaps in most cases where banks render statements they require acknowledgment and confirmation from the depositors. Arrangements may be made by the auditor to send out these forms himself and have them returned to him, to be turned over to the bank later. If the bank maintains a separate auditing department it may be satisfactory for the outside auditor to accept the confirmations sent to the bank, but this expedient should be adopted only at the direction of the client.

When it is not considered advisable to request confirmation of all balances—which is usually the case, especially with savings banks, where a call for all pass books is feared to result in a "run" on the bank—such pass books as are presented by depositors during the examination may be inspected by the auditor, or if the examination is made at the end of a month a certain number of statements or of pass books for checking accounts may be selected for comparison of the balances and requesting confirmation.

Some such procedure as the foregoing will be found to apply to the verification of any liability accounts similar to bank deposits. The verification of payments on shares of a build-

ing and loan association must also take into consideration the amount to be paid and the terms of payment.

Dividends Payable.

By dividends payable is meant dividends declared but wholly or partly unpaid. Promptly upon the declaration of a dividend it should be charged to profit and loss or surplus and credited as a liability. The source of information regarding the declaration of dividends and dates when they are payable is the minutes of the board of directors' meetings.

Close corporations are often lax with regard to the formal declaration of dividends, especially on preferred stock, or the recording of such action in minutes. Although the laws of most, if not all, States provide that distributions of profits by corporations must be acted upon by the directors, failure to observe that requirement is usually not a serious matter if the dividend is clearly justified with respect to the profits and the available cash. Dividends on preferred stock are sometimes declared indefinitely in advance, payable at stipulated quarterly or semi-annual intervals.

Whenever a dividend is paid without evidence of formal authorization the auditor should call attention to the matter in his report as a failure to observe proper corporate procedure. When there is laxity in this respect, and the possibility that payment of a dividend may be pending at the date of the balance sheet, the auditor should make inquiry to ascertain whether there should not be a liability for a dividend payable. The basis for such an inquiry would be furnished by finding that a dividend had been paid immediately after the close of the fiscal year or that it is the usual practice to do so.

After the payment of a dividend there may be no record of any checks that have not been returned paid, except as outstanding checks in the bank reconcilement. Most corporations treat the payment of dividends the same as that of any other liability, charging the liability account—or possibly profit and loss directly—and crediting cash. Many large corporations, however, deposit the total amount of a dividend in a special bank account or pay it to a fiscal agent for disbursement to the stockholders, keeping the special cash account and the Dividend Payable account open until the return

of the checks, thus showing a liability for any checks unpresented. Under such conditions the liability account and corresponding asset account are verified by a certificate or statement from the depositary of the cash.

Dividends payable should not include dividends accrued or accumulated. If it is desired to accrue a dividend, which it is known will be declared, to the date of the balance sheet, such accrual should usually be treated as a reserve, although some companies, notably public utility companies, include accrued dividends on preferred stock—which they regard as fixed charges—in current liabilities. Sometimes it is desirable to accrue a dividend on preferred stock in order to show in the balance sheet that the surplus is applicable to the common stock.

Dividends in arrears on cumulative preferred stock should not be set up in the accounts, either as a liability or as a reserve. As a matter of information only it is desirable to state in a foot-note to the balance sheet that dividends on the stock have not been paid or declared since a certain date, preferably also giving the amount in arrears at the latest date to which payment should have been made. Of course this information is of practical value only when there is a surplus or some prospect of there being a surplus, when it is notice to creditors that the back dividends may be paid from current funds, and to common stockholders that they may expect no dividends until the holders of the preferred have been paid.

Matured Interest Payable.

This item of a balance sheet represents interest actually due as distinguished from interest accrued. It will virtually always apply to interest on funded debt, and will consist of interest payable the next day, interest in default, or unpresented interest coupons, or checks for registered interest, for the payment of which cash is on deposit.

Unpresented coupons and interest checks are of the same nature as outstanding dividend checks, discussed under the preceding caption. Coupons are, however, almost invariably paid through the trustee for the securities, from cash deposits in a special account for the total of each interest payment, the cancelled coupons being surrendered by the trustee as vouchers

for the charges to the deposit account. In view of the fact that coupons may not be presented for some time, the identity of the holders being generally unknown, and that it is desirable to maintain accounting control over those outstanding, it is the best practice to keep open the cash and liability accounts until all the coupons of each series are presented. Any such liabilities should, of course, be offset by cash on deposit.

It is necessary that interest in default be continued to be accrued and added to the liability account, except where the interest is payable conditionally, such as on income bonds, and where the accounts are those of a receiver or trustee, when it is usually proper to disregard the interest accruing on subordinate issues of securities. Interest on income bonds is virtually the same as cumulative dividends on preferred stock, and when unpaid is subject to the foregoing remarks in relation to arrears of such dividends.

Unclaimed Wages.

In a balance sheet audit the liability for unclaimed wages will receive little or no attention. In a complete audit the principal feature of verification is investigation of the opportunity for fraud in failing properly to account for the cash. The system of disbursing pay-rolls should be given attention for the purpose of ascertaining whether there are adequate safeguards against the diversion of unclaimed wages; this matter is discussed further in Chapter XVI in connection with expenses (page 326 *et seq.*). The charges to the liability account should be examined to see that the disbursements have been proper.

The cash representing unclaimed wages is often carried on hand for a month or so before being turned into the general funds. Whenever there may be considerable amounts involved, and the scope of the audit contemplates such detailed procedure, the auditor should account for the cash that should be on hand as shown by the paymaster's records.

It is seldom necessary to carry unclaimed wages as a liability for more than one year, although some companies employing large numbers of unskilled laborers find it desirable to carry the liability for two or three years. When the maximum time determined upon has elapsed, the remaining

credits for the earliest fiscal period should be written off at the end of each current period, a complete record being kept for reference in the event that the amounts are subsequently claimed.

Accrued Liabilities.

An accrued liability represents a proportion of an amount which will eventually be payable but which is not due at the date of the balance sheet. This proportion may be based upon the lapse of time or some other factor, as will be seen. The usual classes of accrued liabilities are as follows: salaries and wages, commissions, taxes of various kinds, interest, and sundry fixed or determinable expenses which are payable at the end of stated periods. The last named class might include rent which is not payable in advance; legal, accounting, or other fees; gas, electricity, and water; dues and subscriptions not payable in advance; and perhaps other items.

In addition to fixed or determinable expenses which can be accrued currently during a fiscal period, there may be included in accrued liabilities at the end of the period the amounts of any unpresented bills, or of bills in the office but not regularly recorded as liabilities, which constitute charges against the operations for the period. The reason for the treatment of such items as accrued liabilities on the books is that of expediency only; they may more properly be classified in the balance sheet as accounts payable.

With regard to the necessity of accruing liabilities and the requirements as to accuracy in such accruals, the auditor should take the broadest and most practical view possible. He should not permit his instinct for precision to lead him into devoting time to computations of accruals, and adjustments of the accounts therefor, unless the result of his efforts will stand the test of practicality. The discussions of particular items to follow are all subject to this qualification.

Salaries and wages.—The accrual of salaries and wages at the end of any month is ordinarily limited to those payable weekly. Any amounts unpaid on monthly or semi-monthly pay-rolls should be included in accounts payable. In the determination of accrued salaries and wages, if the amounts actually earned by the respective individuals to the date of the balance sheet have not been computed it is usually regarded as

sufficiently accurate to take the proportion of the pay-roll for the current week that is represented by the number of days thereof in the earlier fiscal period. The source of the verification of this accrual is the pay-roll.

Commissions.—Accrued commissions represent commissions earned by salesmen or others to the date of the balance sheet which are not yet payable. As to salesmen's commissions, the accrual is usually based upon sales orders billed, and is subject to verification by means of the commission record, the entries in which should be tested by comparison with the sales record. Whenever commissions are paid, as evidenced by the charges to expenses, the auditor should see that full provision is made for the accrual thereof. There can be no good argument for not doing so when the sales have been taken up as income, even though the commissions may not be payable until the accounts are collected.

In connection with the verification of accrued commissions, attention should be given to any debit accounts with the individuals representing advances against commissions. It may be that the liability appearing in the credit account has in fact been discharged by the advances.

Taxes.—Provision should be made for the accrual to the date of the balance sheet of any taxes which will be payable subsequently and apply, in accordance with the terms of the assessments, in whole or in part to the fiscal period ended on that date. The taxes payable by a business concern may be many and various (and the tendency is certainly not in the direction of curtailment) but all essential features from the auditing standpoint are exemplified in two classes; namely, property taxes and income taxes. Taxes payable in advance have been discussed under the head of Deferred Charges in Chapter XIII (page 252).

Property taxes should be accrued upon the basis of those paid for the preceding tax year, subject to any known change in the tax rate or in the assessed value of the property. If there has been a change in the real estate owned since the latest assessment, or a material change in the taxable personal property, it should, of course, be taken into consideration.

The accrual of income taxes should represent the amount which is expected to be paid, based upon the taxable income for the tax year. If the period is less than a year there is no

difficulty in accruing a tax at a flat rate such as is in effect for the Federal corporation income tax at present (1924), but a tax at graduated rates will have to be estimated. Every auditor should have a good working knowledge of Federal and State taxation, the former running back at least to the first income tax law, effective March 1, 1913, and including the corporation excess profits taxes which were in effect from 1917 to 1921, inclusive.

A tax on the income for the current year should be accrued as a charge against that income, and while such an accrual may generally be spoken of as a reserve it should be treated as a liability at the end of the year. Many concerns prefer, however, to treat the tax as payable out of the income of the year in which it is paid. This practice is illogical and may be dangerous, as the tax must be paid whether or not there is any income in the year of payment against which it may be charged. Therefore, if the auditor is unsuccessful in having the accounts adjusted to include the accrued tax, he should add a foot-note to the balance sheet and to the income statement to the effect that provision for the tax has not been made, preferably also stating the amount.

If the tax has been computed by the client, whether or not the return has been made out, the computation should be reviewed by the auditor in the light of his knowledge of the laws and regulations and of the accounts. In addition to the verification of the liability, the auditor may be able to render valuable service to the client in avoiding excessive tax assessments, without prejudice to his duty to the Government not to assist in improper evasion of taxes.

The auditor should always have in mind the possibility of additional assessments of income, and possibly excess profits, taxes for prior years. At present the Treasury Department is at least five years behind in its verification of tax returns generally, and there seems to be little prospect of early improvement in that respect. In a first audit it is usually desirable to give attention to the tax returns for several years preceding in order to ascertain whether there is any likelihood of additional assessments being made.

Examination of tax returns may reveal errors in the statement of income or in the computation of the tax, or doubtful points such as the propriety of depreciation or depletion

charges and the amount of invested capital for excess profits tax purposes. Where the auditor has any well established ground for disproving or questioning the propriety of the returns he should see that a reserve is provided for the additional tax that may have to be paid or mention the matter in his report—usually in a foot-note to the balance sheet. The same would apply if an additional assessment is indicated by an examination made by the Treasury Department which has not yet resulted in a formal assessment.

Interest.—Accrued interest payable may be on funded or floating debt. In the determination of the liability reference must be had to the accounts showing the principal of interest-bearing indebtedness and to the interest expense account, the latter showing to what date the latest payment was made.

Interest on unsecured bank loans is usually paid in advance through discounting the notes, but interest on collateral loans is usually payable quarterly. Interest on personal loans may be payable at any time in accordance with agreement. Interest on funded debt which is payable the next day should be designated in the balance sheet as interest payable rather than accrued.

In the computation of accrued interest it is usually satisfactory to adopt the 360-day method, as a practical short cut. Unless there is funded debt the accrued interest payable may be negligible and therefore no adjustment of the accounts for the accrual may be called for.

Sundry expenses.—Accruals of expenses such as rent, gas, electricity, water, and dues, involve in their determination the examination of the related expense accounts to see that all charges to the date of the balance sheet are included. A somewhat cursory inspection of expense accounts which have regular monthly charges, or of analyses thereof, will show whether or not twelve charges have been made during the year. Unless the monthly charges fluctuate materially, it usually makes little difference if they overlap from year to year, that is, whether as regular procedure the December charge is made in that month or in January, provided a full year's expenses are included. Gas, electricity, and water need not usually be accrued unless the amounts of consumption are considerable and the accruals can be determined by meter readings.

Amounts that will be payable for legal, accounting, or simi-

lar services may be accrued if the services have been partially performed within the accounting period and a reasonable basis for apportionment of the expense can be arrived at. The fee to be paid for auditing the accounts for the period in question, for example, would usually not be regarded as a liability unless some service had been performed prior to the end of the period. There should, however, be no objection to the inclusion of such a charge in the expenses for the period with a corresponding credit to an accrued liability account.

Funded Debt.

The distinguishing feature of funded debt is its term. The expression "funded" is generally understood as applying to obligations maturing in more than one year from the date of issue, regardless of whether or not they are secured. Funded debt is, therefore, practically synonymous with long-term debt. The obligations may be bonds, debentures, long-term notes, certificates of indebtedness, or mortgages; or may perhaps be otherwise described without being essentially different from one of these.

Verification of balance.—In a complete audit, any credits and charges to funded debt accounts during the audit period should be examined in detail and full particulars of all transactions should be inquired into. In the case of a corporation, the issue or assumption of funded debt may be expected to have been formally authorized by the board of directors and be covered in the minutes. An additional source of information regarding the issue or assumption of a mortgage may be furnished by the deed or contract for real estate purchased. In a balance sheet audit, the ledger balance may generally be accepted subject to its verification, without examination of the entries resulting in the balance.

In connection with the examination of the entries for the issuance and sale of securities, consideration should also be given to the discount or premium on sales to see that the accounting therefor has been properly carried out. Such discounts and premiums are discussed under the respective heads of Deferred Charges and Deferred Credits (pages 253 and 287).

Corporate bonds, and the like, are usually secured by a mortgage indenture whereunder a trustee, usually a trust com-

pany, is appointed to represent the holders of the securities. The trustee in such cases is required to control the disposal of the securities by certifying each instrument issued and keeping a record of issues and retirements.

When there is a trustee, he (or it) should be requested by the client to furnish a certificate to the auditor with respect to the amount of securities issued, retired (if any), and outstanding, according to the trustee's records, at the date of the balance sheet. Such a certificate would also be made to include any deposits in a sinking fund for the redemption of the securities and any cash on deposit for the payment of interest and, possibly, of matured securities not presented.

When there is no trustee, it will usually be impossible to obtain any independent confirmation of coupon securities outstanding, but it will be possible to do so with respect to registered securities and mortgages. However, it is usually unnecessary, and in fact futile, to obtain such confirmations unless the obligations have matured or unless there is some doubt as to the full amount of the liability having been recorded and the conditions are such that assurance in that respect can be had by obtaining confirmations from the known sources of proceeds of the securities. If the obligations have matured and are in default there will always be some available means of establishing evidence of the amount of creditors' claims.

There will usually be no reason to question the amount of the liability if the full amount of the securities authorized, or the amount authorized to be issued at the time, is shown as outstanding. If there is a discrepancy in that respect a complete investigation should be made. Any errors in crediting proceeds to the wrong account would presumably be discovered by the audit of the other accounts, even if the investigation prompted by the discrepancy between the amount authorized and the amount received did not result in its disclosure. It is unlikely that an understatement of securities outstanding would be discovered by communicating with security holders of record.

To summarize, it is usually practicable to confirm the amount of securities outstanding only when there is some agency through which the securities are issued, such as a trustee; but wherever there is doubt concerning the amount

of the liability, in view of collateral information, all possible steps should be taken to determine the true amount. The amount of interest paid on the securities should always be taken into consideration, but of course it is conclusive only in the absence of fraud.

Mortgages should generally be carried as liabilities and not deducted from the property mortgaged to show the equity. This subject is discussed at some length in connection with the valuation of land and buildings, in Chapter XII (page 217).

Matured funded debt outstanding should be shown in the balance sheet as a current liability. Opinions differ as to the treatment of funded debt which will mature in whole or in part within a year. In the opinion of the author it is generally proper to be guided by the intention of the company as to whether the obligation will be paid or refunded, assuming that it can in fact be refunded if desired. It is thought that in any event no harm can be done by excluding the item from current liabilities provided full particulars as to the maturity are shown in the balance sheet.

Treasury securities.—Treasury bonds, and similar securities, are those which have been sold and reacquired but not retired, or have been issued only for use as collateral to other indebtedness. The latter condition will be found to apply to no other than mortgage bonds, as the only reason for pledging one obligation as collateral to another is to obtain the effect of security to the direct obligation in the form of a lien on the property. When this is done the lien becomes as effective upon the utilization of the mortgage bonds as collateral as it would be if the bonds themselves had been sold; therefore it is necessary to treat the bonds pledged as issued and as owned by the issuing company.

It may thus be proper to treat in the balance sheet an entire authorized issue of bonds as issued, and in the treasury—pledged. There is no occasion, however, to treat as treasury bonds those which have merely been executed and are on hand but have not been sold or pledged. It is customary to deduct treasury bonds, et cetera, from those issued, designating as such those that are pledged, even though the entire issue may be in the treasury. This may not be practicable, however, unless the treasury securities are carried on the

books at par or face value. Bonds carried as in the treasury merely because they are pledged will, of course, always be carried at par value, but the same cannot be said of securities purchased for the treasury at a discount or premium.

The valuation of treasury securities acquired by purchase should depend upon the intention with regard to their disposal. Securities purchased with the intention of retiring them, through the sinking fund or otherwise, should be valued on the books at par. Any adjustment from cost to par value should take into consideration the unamortized discount or premium on the bonds. There are times, however, when securities are purchased and held subject to resale. In such a case they should be carried at cost, and preferably among the assets; in fact, the only way they could be deducted from the liability for securities issued would be to adjust the book value to par for balance sheet purposes only, carrying the difference as a deferred charge or a deferred credit or reserve.

The possession of treasury securities should be verified by inspection or by obtaining confirmation as to those pledged. The latter will be done in conjunction with the certification by the trustee as to the other matters in connection with the issue as collateral to which the bonds are pledged. Verification by inspection should follow the lines laid down in the general discussion of Securities Owned, in Chapter XI.

Interest may or may not be paid on treasury securities and on those held in a sinking fund, but is usually paid on coupon bonds. It is really unimportant as to whether or not interest is paid, as the amount paid would revert to the credit of income, but the auditor should give the matter attention to see that the net charge for interest applies to only the bonds outstanding in the hands of the public.

Retirements.—Satisfactory evidence of the redemption of matured funded debt may be furnished by the payment of the cash for that purpose, either to the trustee or to the individual holders, but it is better to inspect the cancelled securities or a certificate from the trustee in lieu thereof. The trustee usually cancels the instruments and then either turns them over to the issuing company or cremates them and issues a cremation certificate. When securities are retired in advance of maturity some evidence thereof other than the

payment of the cash is always necessary, in order to be certain that they cannot be disposed of again.

When cash is paid to the trustee for the redemption of an issue of securities the best practice is to carry the cash in an asset account pending the delivery by the trustee of the cancelled securities or of some satisfactory evidence thereof. There will thus be cash on deposit equal to the securities not presented for redemption or not turned over by the trustee, precisely the same as when cash is deposited for the payment of coupons, and both balances will be verified by obtaining confirmation from the trustee.

When the securities are retired by exchange for those of a refunding issue the procedure of verification is the same as when payment is made in cash. Such exchanges are virtually always effected through a trustee, who will deliver to the company cancelled bonds of the old issue, or a certificate in lieu thereof, in support of the issuance of the new securities.

In connection with the evidence of cancellation or destruction of securities, it is important that coupons be accounted for as well as the securities themselves. The cancelled coupons should be on hand or be covered by cremation certificates. If they are on hand, those for each bond should be pasted on one sheet or otherwise kept together. If they are not kept in good order the auditor should not usually take it upon himself to do the clerical work of assorting but should demand that it be done by the client's office force. Where there is a large number of securities, tests of coupons should suffice. It is especially important that coupons of future dates be accounted for when securities are retired before maturity.

It is not usually regarded as necessary for an auditor to ascertain that a mortgage is discharged of record when the securities represented thereby have been retired.

CHAPTER XV

LIABILITY ACCOUNTS—Concluded

Deferred Credits.

Deferred credits are exactly the opposite of deferred charges, which have been discussed in Chapter XIII. They may be said generally to represent advance collections of income, and receipts the ultimate disposition of which has not been determined. Among the items to be so classified are the following:

- Premiums on funded debt.
- Interest, rent, royalties, dues, subscriptions, etc., received or billed in advance.
- Advance collections or billings on contracts or other sales.
- Unpresented tickets, commissary coupons, etc.
- Unexpended portion of amounts received from insurance, etc.
- Suspense accounts—subject to determination of proper disposition.

Premiums on funded debt are subject to the same rules as govern the amortization of discount on funded debt, which subject is discussed at some length in Chapter XIII (page 253); that is, they should be spread over the actual life of the securities. Any expense in connection with an issue of securities may properly be applied in reduction of the premium on the sale of the securities.

Advance receipts or billings of interest, rent, royalties, dues, subscriptions, and the like, will be transferred to income in the periods to which they properly apply. The determination of such deferred credits involves examination of the corresponding income accounts. As has been stated with respect to prepaid expenses and accrued income and expenses, virtually the only purpose of considering such items as these is the equalization of income over the fiscal periods. Under ordi-

nary conditions no harm will result from ignoring advance collections of income if in any year there are only twelve months' credits from each source of income, regardless of whether those credits represent actual earnings or cash receipts.

Amounts collected or billed in advance on contracts or other sales may properly be treated as deferred credits in some cases and as current liabilities in others. The determination of the proper balance-sheet classification of some of these credits frequently involves some very intricate problems in accounting theory, which need not be discussed at length here. It may be said generally, however, that if the consummation of the transaction, whether it is the delivery of goods or the performance of services, will entail considerable reduction of the current assets, the credit should usually be included in the current liabilities, but if not, it may be classified as a deferred credit. The question is not so much whether the amounts of the credits are payable (they are usually not) as it is whether the relation between current assets and current liabilities will be materially affected.

Collections on uncompleted contracts will be treated as current liabilities only if the expenditures on the contracts are included in the current assets. Such items as the unearned proportion of subscriptions for publications and charges for tuition—which are similar in nature to advance collections of interest and rent—should not usually be regarded as current liabilities, for a going concern, as the reduction of current assets involved in the fulfillment of the obligations from month to month has no direct relation to the advance collections. This, however, is a debatable point, and one upon which it is possible to theorize at such length as to involve the whole balance-sheet structure.

The principal consideration in the verification of deferred credits is the determination of whether income has been properly credited, that is, neither over-credited nor under-credited, in connection with the particular items or class of items. As to collections on uncompleted contracts, the expenditures and the probable outcome of the transactions must be taken into consideration, as it may be that a loss has been or will be sustained and that the credit should be closed against the charge which is to be written off. As to advance collections or billings for services, subscriptions, and the like, it is necessary to deter-

mine the periods involved and compute the unearned portion accordingly. Where the details are voluminous, as they usually are in the case of a publishing house, for example, it should be sufficient to test the detail records in conjunction with approximations based upon examination of the credits to the general ledger accounts for advance collections or billings.

Unpresented tickets, commissary coupons, et cetera, are substantially the same as some of the other classes of deferred credits discussed above. The distinctive feature of such advance collections is that they are represented by negotiable receipts, which should be accounted for if practicable. There are many methods of issuing and cancelling tickets and coupons; some of them provide proper safeguards and some do not. Inquiry should be made as to the method employed, and the detailed verification of the issue and cancellation should be governed by the apparent opportunity for misappropriation of proceeds of the sale of the tickets or coupons, the probability of misstatement of the liability for redemption of those outstanding, and the amount involved. It is as important to verify the possession of the stock of unsold tickets or coupons on hand as shown by the records, by physical inspection thereof, as to determine that those redeemed are accounted for.

When the volume of transactions in tickets or coupons (including brass checks or any similar tokens) is considerable, the audit thereof may be limited to tests, the extent of the detailed examination being dependent upon the circumstances, including the understanding with the client as to the scope of the work. Any manifest lack of care in the accounting should be reported.

In connection with the liability for redemption of tickets and coupons, consideration should be given to the fact that there are always some which are not presented. The proportion not presented is comparatively small in the case of railway tickets, which on the average have considerable cash value, and is large in the case of premium coupons which are redeemable in merchandise. When the concern has issued tickets or coupons for a considerable time it is possible to arrive at a fairly close approximation of the proportion that will not be presented for redemption by comparing the increases or decreases in the amounts shown by the accounts as outstanding

with the amounts issued during the respective periods. When no satisfactory conclusion in this regard can be reached it is often desirable to start a new series and keep separate records for redemptions of the old and new series. Any considerable overstatement of the liability, as indicated by an estimate upon a reasonably sound basis, should be adjusted by a transfer to income.

The other items, not specifically discussed, which may be classed as deferred credits, appear to require no comment except to say that each item should be investigated with a view to determining whether it would not be proper to treat it as a liability, a deduction from an asset, or as income. When the status of the item has not been definitely determined it may properly be carried in suspense for a reasonable time.

Reserves.

Reserves, as they are encountered in auditing, are of four general classes, which may be generally described, in the order of their frequency, as follows:

1. Valuation reserves, or reserves against asset valuations, such as: reserves for depreciation, depletion, and amortization; reserves against accounts receivable (doubtful accounts, discounts, and allowances); reserve for cost to complete contracts; reserve against donated treasury stock.
2. Provisions for payments of expenses and other charges out of the income for the period in which the provision is made; such as reserves for taxes and commissions. In most cases these are properly regarded as accrued liabilities rather than reserves.
3. Appropriations of surplus for specific purposes.
4. Endowments, etc., which are often designated as reserves.

The first two groups cited, valuation reserves and accrued liabilities, are discussed elsewhere under the head of the respective assets and liabilities. Endowments, et cetera, the fourth group, usually represent capital, and will be considered later. This leaves for discussion appropriations of surplus, which are regarded by some as the only true reserves.

Appropriations of Surplus.

Appropriation of surplus is a highly theoretical concept which is somewhat elastic in its application; that is, the appropriation may be formal or otherwise, and may be absolutely necessary or be optional and therefore reflect conservatism. Without particular regard to the necessity for their creation, the reserves which are more or less commonly encountered and which may be characterized as appropriations of surplus are stated as follows:

For guaranties of product or services.
For losses on claims in litigation.
For losses on purchase commitments.
For repairs and renewals—other than ordinary depreciation reserves.
For accrued dividends.
For insurance—insurance companies or others.
For injuries and damages to persons and property.
For sinking or redemption funds.
For construction of buildings or other capital acquisitions.
For contingencies.

Reserves for guaranties of product or services.—No rules can be laid down for the guidance of an auditor with regard to the necessity or desirability of making provision for losses on account of claims for guaranty of product sold or services performed. Nearly all concerns undertake to guarantee, either expressly or impliedly, the goods or services furnished by them, whether or not payment therefor has been made. Wholesale and retail traders can generally, however, recoup themselves for any losses on account of such guaranties by recovery from the producers of the goods. For practical purposes, therefore, it is only the original producer who has any liability on account of guaranties, and that liability is in most cases rather remotely contingent.

There are cases, however, where experience with a certain product has demonstrated that the materials or manufacture are faulty and it has been necessary—perhaps purely from the standpoint of policy—to make large allowances or refunds. Such a condition might be disclosed to the auditor by

an inordinate proportion of returns and allowances. The existence of this condition would indicate the necessity of making provision for further losses on the sales to the date of the balance sheet.

In any business where the product is of an experimental nature, or where experience indicates that relatively large allowances will be granted, there should be some provision for claims on account of defective goods. If a definite proportion of sales is set aside for that purpose, such amount as applies to outstanding accounts receivable should be deducted therefrom in the balance sheet; but if the provision is general in nature and it is impracticable to make any division as between the amounts applying to sales paid for and not paid for, the reserve should be carried among the liabilities. The provision may be in the form of a specific reserve for allowances or for guaranty of product or be represented in a reserve for contingencies. The foregoing all applies equally to guaranties of satisfaction of services performed, although there are comparatively few cases where such guaranties need to be considered.

Under ordinary conditions, where there is no special reason to believe that claims on account of guaranties will be large, provision for such claims is not regarded as necessary. Allowances on sales always overlap, that is, there are always some granted in one fiscal period which apply to sales made in prior periods, but in the absence of unusual conditions the auditor need not be concerned regarding the necessity of either creating a reserve for the allowances or treating them as charges against the surplus at the beginning of the period in which they are granted. There are, of course, some cases of very extraordinary allowances where it is desirable to relieve the current operating accounts by charging them against surplus.

Reserves for losses on claims in litigation.—Information regarding pending litigation may be derived from the minutes of a corporation, from the examination of bills for legal expenses, or from inquiry of the executives of the business. In comparatively few audits is pending litigation encountered, but no harm can result in any event from an inquiry by the auditor on the subject. When there is evidence of litigation that may result in loss to the concern, the auditor can, of course, form some opinion regarding the probable outcome, but even though

he may believe that judgment will be rendered against the client, or though there may have been an adverse decision in one court, or even more than one, the case having been appealed to a higher court, the auditor may not be warranted in insisting that a reserve for the possible loss be created. Though the client may have little hope of a favorable decision he may be averse to recognizing on his books or in the balance sheet even the prospect of a liability, thinking that by so doing he may prejudice his case. When the auditor has knowledge of pending litigation which may possibly result in any considerable loss he should always report it as a contingent liability, but beyond that he should not go, except in the most extreme case, without the consent of the client.

Litigation of any kind, and regardless of the outcome, involves legal expense. Where there is evidence of protracted and important litigation the auditor should see that attorneys' bills have been received and entered or that some provision therefor is made in the accrued liabilities.

Reserves for losses on purchase commitments.—When there are outstanding purchase orders involving relatively large amounts and the market value of the goods ordered has considerably declined, it is desirable that provision be made through a reserve for such loss as may be sustained by paying for the goods upon their receipt at prices higher than those generally prevailing at that time. This is a subject that demands careful study in the light of all pertinent facts and probabilities.

The fact that the market for the goods contracted for has declined is not conclusive evidence that a loss will be sustained, as the goods to be received, or the product thereof, may have been sold in advance under sales contracts at prices based upon the cost commitments. In this connection, the responsibility of the buyers must be taken into consideration, as in a declining market there is likely to be an epidemic of business failures and cancellations of orders.

In the determination of probable loss it is also necessary to give studious thought to the economic situation generally and to whatever may be learned regarding conditions in the particular industry, in an effort to form an opinion concerning the probable duration of the downward movement of prices and its effect upon the business under audit. While it may

not be generally regarded as proper for an auditor to apply his individual ideas as a business forecaster to the preparation of a balance sheet, there are times when he must co-operate with his clients in studying their needs—often, however, opposing their optimistic tendencies—which requires that he be able to give constructive advice along the broad lines of sound business practice as applied to abnormal conditions. In doing so he must often rise above the rule-of-thumb procedure which dictates that, regardless of conditions, the accounts must be stated thus and so. In any doubtful case the auditor should, however, lean toward a conservative policy.

It has been stated in Chapter X that the basis of valuation of merchandise on hand which is generally regarded as sound is the lower of cost or market at the date of the balance sheet, unless, for some special reason, valuation at cost is conservative even though it exceeds market. It logically follows that, from the standpoint of conservatism, when market, being lower than cost, is adopted as the basis for valuation of merchandise on hand, it is desirable to extend the application of the principle to merchandise which is about to be received. This can always be stated as a desirable practice, unless, indeed, there are indications of further declines in the market after the date of the balance sheet which make it advisable to correspondingly reduce the inventory valuations and increase the reserve to be established for losses on purchase commitments. However, as intimated above, if there is any reasonable justification for assuming that the downward trend of prices is temporary—which might in some cases be furnished by knowledge that the prevailing price is considerably below the cost of production of the basic commodity—it may not be considered necessary to provide for the indicated losses on commitments, or at least not for the entire amount that may appear to be called for. Manifestly, an auditor must always be prepared to sustain reasonably any position he may take which does not recognize the full decline in market value.

The source of the auditor's information on the subject of losses on purchase commitments is to be found in the valuation of the inventory—wherein it will be learned whether there has been a considerable decline in the market value of the merchandise on hand—supplemented by a recapitulation of the purchase orders outstanding. If the quantity of merchandise

on order is inconsiderable, or if the decline in prices is slight, it will, of course, be unnecessary to create a reserve.

Reserves for repairs and renewals.—A reserve for repairs or renewals is similar in nature to a reserve for depreciation. In fact, there may be no difference if the word "renewals," or the synonym, "replacements," is intended to mean ultimate replacement of the property unit. In the sense in which such terms are generally used in connection with reserves, however, they are synonymous with repairs or maintenance. They are frequently employed, especially by public utility companies, to denote provision for renewals of furnace linings, ties, and other property items which have a comparatively short life.

Regardless of the terminology, the reserves in which we are at present interested represent provision for more imminent charges than the ultimate replacement of property, for which depreciation reserves are usually created. It is admitted that the distinction is a very nice one, especially when the provision covers charges which are on the border line between current maintenance and replacements of large units, and considering that "depreciation" is not usually very clearly defined.

When it can be done with reasonable accuracy—which is seldom—confusion on this subject is best avoided by creating one reserve to cover all expenditures that may be incurred to keep the facilities intact and in working order, whether such expenditures are described as repairs, maintenance, renewals, replacements, or depreciation. The primary purpose of creating any and all reserves for charges in connection with the upkeep and ultimate replacement of property is to apportion the cost over the periods during which the property is utilized; the purpose of measuring the decline in value of the property for balance-sheet purposes is secondary.

Dismissing these theoretical aspects of the situation—which, however, should be thoroughly understood—attention will be given to reserves which are created for the purpose of equalizing charges for current repairs and minor renewals. The creation of such reserves is optional with the concern. As action to that effect is prompted by a desire for conservatism in the statement of profits, it is to be commended. There is usually little or nothing that an auditor is called upon to do in connection with the verification of such reserves. Their nature

is such that they should not be deducted from the asset balances.

There are cases, however, where reserves designated as for repairs or renewals are carried in lieu of provision for depreciation as that term is generally understood. In that event, the reserves should be regarded as subject to the principles governing provision for depreciation, as discussed in Chapter XII.

Reserves for accrued dividends.—A dividend is not a liability, even an accrued liability, until it is declared. Some corporations, however, accrue dividends, especially on preferred stock, just as they would interest on funded debt, regarding the dividends as fixed charges. There are also cases where it is desirable to show in the balance sheet the equity of common stockholders, which necessitates accruing preferred dividends.

Whenever it is desirable to give effect to such an informal appropriation of surplus by accruing a dividend, the credit should be treated as a reserve, although there are cases, especially of public utility companies, where accruals of dividends on preferred stock are customarily designated as liabilities, and the auditor will be serving no good purpose by departing from the client's usual practice in that respect. The point is that an auditor should not take the position that an undeclared dividend is a liability, even though he may know that it will be paid, but, on the other hand, he should not object to treating it as a liability if any preference therefor is expressed by the client.

Insurance reserves.—In the case of an insurance company, there is nothing that an auditor can do toward determination of the adequacy of the reserve against outstanding insurance other than to obtain a certificate from the actuary or the State insurance department, or to see that the credits and charges to the reserve have been in accordance with established rules and that the changes in the balance of the reserve correspond to changes in the insurance in force. It is impracticable in this work to devote any attention to the special features of insurance company accounting—involving life, fire, marine, casualty, fidelity, and surety risks.

Insurance reserves are sometimes carried by concerns other than insurance companies. The reserve in such a case represents provision for losses from fire or casualty in lieu of carry-

ing any or all insurance with insurance companies; in other words, the concern is to some extent carrying its own insurance risk. This may be said generally to be a very hazardous business policy, especially with respect to fire insurance, unless the properties covered are widely separated. It may not be so hazardous, however, for a concern to carry its own liability or other casualty insurance.

In any event, none but a financially strong concern should undertake to assume insurance risks. An auditor should have no hesitancy in commenting upon the adoption of any business policy such as this which may seem to him precarious. He may explicitly criticize the policy in his report or merely state the facts for others to form their own conclusions.

When a concern carries its own insurance risks it should, as a rule, set aside a substantial sum as the nucleus of a fund. This amount would usually also be charged against surplus and carried as a reserve, but it might merely be invested and definitely segregated as an insurance fund without the creation of a reserve. To the fund thus established should be added the premiums which would be paid if regular insurance were carried, or possibly somewhat reduced amounts, allowing for the profit to the insurance companies in regular premiums. These periodic accretions to the fund should be charged to expenses and credited to a reserve. Income from the investments will usually also be added to the fund and carried to the reserve through the income accounts.

Failure to carry out substantially these requirements, with the possible exception of the establishment of an original principal of the fund, and to adjust the reserve as may appear necessary on account of losses, would be tantamount to discontinuance of provision against loss to that extent, and should be reported by the auditor, just as he should report failure to carry adequate insurance protection under ordinary conditions. This applies particularly to the risk of fire and similar losses. It may, however, be entirely proper for a financially strong concern to assume its own risks in connection with liability to employees and the public on account of accidents, which are generally covered by liability insurance, just as it is regarded as entirely optional with a concern as to whether or not it shall carry use and occupancy insurance. In some States having workmen's compensation and similar laws, concerns which

can prove their financial ability to assume their own risks, or which make a deposit to guarantee claims, are relieved from carrying insurance with insurance companies or with the State.

Reserves for injuries and damages.—Even when a concern is financially able to withstand any losses which are likely to be sustained on account of injuries to persons or damages to the property of others, without making provision therefor in advance, consideration should be given to the equalization of such losses over the respective periods and the proper statement of operating costs. Mining, manufacturing, and public service companies usually sustain large losses on account of casualties, and it is highly desirable that provision be made therefor in the current operating expenses, so that the operations in any one period will not be unduly burdened with such charges. Provisions for these losses are usually carried in some such reserve as for injuries and damages. If this is not done, it may be appropriate for the auditor to criticize the accounting procedure, if not the lack of conservatism.

Whenever a claim has been determined to be payable, it should be set up as a liability, whether or not payment is to be made at once. Indemnities are often payable in instalments over a considerable period. When the payment of a claim can be foreseen with any reasonable degree of certainty, it should be provided for, unless provision has already been made through a reserve. In the audit of any concern where liability claims are likely to be made—which, in some States, may be nearly all concerns—the auditor should make inquiry concerning any pending claims.

Sinking or redemption fund reserves.—Reserves falling in this category are usually for the purpose of retiring funded debt, but are sometimes for the redemption of preferred capital stock. There is a great deal of misapprehension of the purpose and effect of the creation of such reserves, involving confusion of the reserves with the corresponding funds.

The accomplishment of the purpose for which sinking or redemption fund reserves are created requires primarily the setting aside of a definite fund out of the assets, this fund eventually to be utilized for the retirement of the securities. There is a prevalent notion to the effect that charges must be made against income, and a reserve created, equal to the amounts set aside in the fund. This notion is fostered by the

common provision in mortgage indentures to the effect that sinking fund payments must be made "out of earnings."

It may be stated generally that such a provision need be taken to mean no more than that the cash necessary to make the sinking fund payments must be derived from the operations and not borrowed. There are cases, however, where it is undoubtedly the intention that the income available for dividends shall be reduced by the amount of the sinking fund requirements until they have all been met. As a matter of fact there may be no essential difference in the practical application of these two requirements. The intent of both may be to restrict the payment of dividends so that the cash needed for the retirement of the securities will not be paid to the stockholders. This purpose is accomplished if dividends are paid only when cash derived from the operations is available, after making the sinking fund payments, and a surplus is allowed to accumulate. It is not accomplished, and the provision is violated in principle, at least, if dividends are paid in excess of cash available from operations, money being borrowed for the purpose, although the sinking fund payments may literally have been made from earnings.

In view of the foregoing, it seems that when a company is required to set aside a sinking fund out of earnings the safest method is to set aside not only the cash but also surplus to the same amount. The latter will be done by charges to surplus and credits to a reserve. The reason for doing so is that the amount of surplus unrestricted as to dividends may be shown. The reserve should always, however, be regarded as a merely temporary appropriation of surplus, and should be shown in the balance sheet under the general head of surplus. When the bonds have been redeemed, and the sinking fund itself disbursed, there will no longer be any reason for carrying the reserve and it will revert to free surplus. Unless there is a requirement in the indenture that the sinking fund be paid out of earnings there is no occasion to create a reserve.

The redemption of a bond is not essentially different from the payment of a short-term note. In either case the transaction involves merely a credit to cash and a charge to the liability account, the only difference being that in the case of bonds for the payment of which cash has been set aside in a

sinking fund, the credit is to the sinking fund account. Obviously, no charge to surplus is involved.

Bonds are usually issued in connection with the acquisition of property. They may or may not be redeemed before the property becomes valueless; that is unimportant from the standpoint of the question at issue so long as provision for depreciation of the property is made throughout the term of the bonds. The entire cost of depreciable property will eventually be charged against surplus by means of depreciation, so it is obvious that no further charge to surplus should be made for the sinking fund payments to retire the bonds.

The situation is different in the case of municipal bonds issued to pay for capital acquisitions. In general, the bonds run for a period not considerably less than the life of the property, and contributions to a sinking fund virtually constitute instalment payments for the use of the property during its life. The contributions to the sinking fund in such cases take the place of provision for depreciation. It is likely that if the function of depreciation were better understood by the persons responsible for the drafting of mortgage indentures of private companies the customary stipulations as to the setting aside of a sinking fund out of earnings would be generally changed to a requirement that the property of the company be adequately depreciated.

If a sinking fund reserve is created, it should agree with the amount of the sinking fund. This would apply even though the fund were deficient, the only purpose of the reserve, as aforestated, being to appropriate surplus to the amount of the sinking fund payments in order to prevent the dissipation of the surplus in dividends. This should not be confused with the setting up of an accrued liability for sinking fund instalments, which is sometimes desirable. As stated in the discussion of sinking funds, Chapter XI (page 207), failure to observe the requirements of the indenture under which the bonds are issued should be reported by the auditor.

What has been said regarding reserves for the retirement of funded debt applies equally to the retirement of preferred stock, with the exception that when the stock is to be retired at a premium the amount of the premium is chargeable against surplus. When the future retirement of the stock is anticipated to the extent of setting aside funds for the purpose, the

portion of the funds thus set aside which represents premiums may well be charged to surplus and credited to a reserve at the time of making the segregation of funds.

Reserves for capital acquisitions.—Occasionally an auditor encounters a reserve charged against surplus offsetting a fund set aside for some such purpose as payment for contemplated construction or other capital acquisitions; or the fund may not be set aside, only the reserve being created. The creation of such a reserve is utterly unsound and unwarranted except for those institutions which do not value their assets, or unless the reserve is merely a segregation of endowments or capital.

This should not be confused with an appropriation of surplus representing additions to property through income, which is somewhat common with railroads especially. The significance of such a credit account is merely that the expenditures for the property have been made from funds derived from operations and the amount is thus set aside as not available for dividends. Such an appropriation should be authorized by the directors.

Reserves for contingencies.—There is little to be added to what has been said concerning other reserves in discussing a reserve for contingencies. Such a reserve may be provided to cover any contemplated losses, including those arising from realization of assets, and such items as disputed tax liabilities, or may be merely a general reserve for conservatism. If a reserve for contingencies is carried the auditor will naturally make inquiry to ascertain what contingencies there are.

If provision has been made in such a general reserve for specific losses which may be sustained, it is desirable that the provision be detailed in the balance sheet, so that it will not be thought that the reserve represents merely a conservative appropriation of surplus for general purposes. There are cases, however, where it is inexpedient to do so, as when provision has been made for a possible loss in litigation and it is not desired to disclose the fact.

If, on the other hand, a reserve for contingencies appears to the auditor to be largely in excess of any possible requirements he should so state in his report. It should be remembered that an auditor has a duty to report understatements of values, which is only slightly less important than his duty with respect to overstatements.

Contingent Liabilities.

The adjective "contingent" is thus defined in the Standard dictionary: "liable to occur but not determinable by any rule or law; resulting from an agency or agencies the operation of which is uncertain; not predictable; fortuitous." Unlike many dictionary definitions when applied to technical terms, this one is in perfect accord with the common understanding of the subject.

Contingent liabilities may or may not be offset by contingent assets. Those that usually are thus offset may be stated generally as arising from the following:

Discounted notes and acceptances receivable, and accounts sold with a guaranty.
Discounted unaccepted drafts (partly recoverable).
Accommodation endorsements and guaranties of debts of others.
Unused letters of credit for purchases.
Sale of property subject to a mortgage.

Contingencies not carrying with them the prospect of recoupment from others are those on account of contractual liabilities for guaranty of product or services, judgments, and other claims which if paid constitute losses of the concern. It should not be forgotten that endorsements and guaranties of the obligations of others, in whatever form, may also properly fall in this category unless the likelihood of default on the part of the primary obligors is very remote.

Other contingencies which are sometimes included in this class are those in connection with property held for others, notably consignments inward and leased equipment. As explained in Chapter X in connection with consignments (page 174), there is no reason for recognizing such contingencies at all if the property is protected by insurance and otherwise properly cared for.

Contingent liabilities, when they are actually only contingent, are usually stated on the balance sheet in one or more foot-notes. If there is any known probability of a liability having to be met, it should be set up as an item in the balance sheet, with or without an offsetting asset, as the case may be. If it appears likely that a possible loss will develop into an

actuality, but there is still some uncertainty, provision for the loss may be made in one of the reserves which have been discussed; but if the actual liability has been definitely determined it should be stated as such.

Contingent liabilities on account of endorsements and guaranties of receivables disposed of have been discussed in Chapters VIII and IX under the head of notes and acceptances and accounts receivable (pages 114 and 139). Information regarding any accommodation endorsements or similar guaranties of debts of others must be obtained from some such source as the minutes or by inquiry of the executives. It is generally *ultra vires* for a corporation to be an accommodation endorser, but it is not uncommon for corporations to guarantee bonds and stock of other corporations, usually subsidiaries.

Contingent liabilities in connection with discounted unaccepted drafts on customers are recoverable, in the event of failure of the drawee to pay or accept, to the extent of the cost or present value of the merchandise shipped against which the drafts were drawn. It is the best practice to treat the proceeds of such drafts as liabilities until the drafts have been definitely disposed of as honored or dishonored by the drawees. Information regarding outstanding drafts may be obtained from the records but should in any event be confirmed by the discounting bank.

Contingent liabilities on account of unused letters of credit for purchases arise through the possibility of drafts having been drawn by an agent of the concern, subject to payment or acceptance by the bank issuing the letter of credit, without advice to the concern. The payment or acceptance of such a draft would be accompanied by the creation of an asset for the goods purchased. The amount of the contingent liability is simply the excess of the amount of import letters of credit negotiated and outstanding over the amount of the drafts drawn against them.

A contingency arising from the sale of property subject to a mortgage is usually very remote and need seldom be recognized. The reason for there being any contingency is that when the buyer does not assume the mortgage he is liable, in the event of foreclosure of the mortgage, to no greater loss than the property, and if the sale price of the property should

be less than the amount of the mortgage a claim for the deficiency can be made against the original mortgagor, the seller of the property. It may be stated generally that there is no reason to recognize such a contingency unless it is known that the mortgage is likely to be foreclosed and that the property has deteriorated in value. However, it behooves a seller of property subject to a mortgage (of which there are very many) to keep in touch with the property until he is released from liability by some such action as a renewal of the mortgage by the buyer of the property.

The matter of guaranties of product or services has been discussed earlier in this chapter under the head of Reserves (page 291). As to judgments, it may be desirable in exceptional cases to have an attorney make a search of the public records to determine whether any have been recorded against the concern, but under ordinary conditions the sources of information on the subject are limited to inspection of the minutes and of bills for legal services and expenses, and inquiry of the executives.

What may be regarded as a contingent liability is the possibility of having to pay assessments on stocks owned; that is, to complete payment for stocks which have been issued but are not fully paid, or to be assessed in connection with stockholders' additional liability on bank stocks. Whenever there is any probability that a call will be made for additional payment on part-paid stocks, the amount should be carried as a definite liability. The contingency of being called upon for additional payments on bank stocks is usually so remote that it need not be recognized.

Endowments, Etc.

In an audit of an institution having endowments or trust funds, however they may be designated, it is necessary that consideration be given to any restrictions placed by donors upon the utilization of the funds. It may be stipulated that the principal must be kept intact, subject to losses and profits in changes of investments, or the principal may be subject to use for specific or general purposes. There may also be restrictions on the use of the income. All these matters should be inquired into, and a digest of the provisions of the several

funds should be made and carried in the working papers continuously from one audit to another.

All contributions to an institution are in the nature of capital to be accounted for, the only latitude given to the institution being in the degree of discretion which its officials may exercise in the expenditure of the funds; sometimes they are given unlimited freedom and sometimes none. It follows that a very important part of an audit of an institution which receives contributions concerns the accounting for the receipt and proper disposal of the contributions.

An auditor is usually aided in doing this by the publishing of contributions in annual reports. It is unlikely that any considerable amounts will be omitted from such reports. The auditor should always obtain a copy of each report and compare it with the records. Further, any large contributions should be mentioned in the minutes of the governing body.

Estate Account.

There is little to be said, from the standpoint of auditing as distinguished from accounting, on the subject of an account representing the principal of a trust estate or the assets taken over by a receiver or trustee. The auditing of trust estates involves no special considerations other than a thorough knowledge of the will or deed of trust and of the law and customary procedure governing the actions of executors and trustees.

The only peculiar feature in auditing the accounts of receivers and trustees in bankruptcy is the determination of the conditions of their appointment or election. They may take over all the assets and liabilities, but in perhaps most cases they do not take up liabilities other than preferred claims except as the liabilities are discharged.

Capital Account.

The capital account or accounts of a sole proprietorship or a partnership should be examined for the period of the audit. For a partnership, it should be determined, if practicable, that the capital shown by the books as originally contributed by each partner, as well as his share of the profits and his with-

drawals, are in accordance with the partnership agreement. The drawing or personal accounts of the proprietor or partners should receive close attention, all charges and credits being carefully audited. Debit balances in such accounts should usually be transferred at the end of the fiscal period to the capital account or accounts, or be deducted therefrom in the preparation of the balance sheet. When partners have fixed amounts of capital investments it is usually undesirable to close personal accounts into the capital accounts on the books.

In some cases, notably brokerage houses, partners may carry personal trading accounts, which should not usually be applied to their capital accounts, either on the books or in the balance sheet. Such accounts should, however, be shown separately from customers' accounts in the balance sheet. The balance of the profit and loss account for the fiscal period is usually transferred to either the capital or personal accounts, but undivided profits of a partnership may be carried separately when it is not desired to disturb the capital accounts.

For a sole proprietorship, it makes little difference, except from the standpoint of a proper statement of operations, whether personal expenditures are charged to the capital or personal account of the proprietor or to the operating expense accounts, but this may be an important consideration in the case of a partnership. If any personal expenses, such as income taxes, are charged as business expenses, the auditor should report the fact unless it is feasible to discuss the matter with all the partners. There may, of course, be no doubt that such charges are improper or inadvertent, in which case the accounts should be adjusted.

In the rare cases where property of a sole proprietor or partnership has been appreciated to any considerable extent, it is desirable to indicate in the balance sheet the amount included in the capital representing such appreciation.

Capital Stock.

The verification of capital stock of a corporation involves, as to each class of stock there may be, investigation of the original issue and determination of the amount at present outstanding. The certificate of incorporation and minutes relating to the organization of the company, and possibly subse-

quent minutes, should be examined for information regarding the authorized stock issue, the shares actually issued, and the consideration received therefor, or other data regarding the original value of the stock. Particulars of any preferences and restrictions in the respective classes of stock should also be ascertained from the original corporate records.

It is sometimes necessary to make this investigation of the records of original stock issues regardless of the time intervening between such issues and the audit of the accounts. However, when a corporation has been established for some years there is usually no necessity of undertaking an extensive investigation along this line, other than to ascertain the authorized stock issue, unless there is some doubt as to the accuracy of the capital stock as stated on the books.

Valuation.—Capital stock with par value should be carried at that amount. The laws of most States prohibit the sale of stock with par value at a discount, but it is nevertheless customary, and usually unavoidable, for a corporation to receive less than par value for its stock, the deficiency being represented, actually or ostensibly, by commission on its sale or some other form of organization expense. Many corporations have caused their stock to be legally fully paid by issuing it for property or services and then having some of it donated back to the company to be sold as treasury stock at a discount for needed working capital. When preferred stock has a redemption value in excess of the par value it is not usually considered necessary to provide in advance for the premium to be paid at the time of redemption, but such provision may be made in the form of a reserve if authorized by the directors.

There have been so many abuses in connection with the issuance of stock with par value, brought about by the necessity of balancing the par value with assets, that the issuance of stock without par value is now being permitted by many States and the practice is being widely adopted. Owing to the diversity and ambiguity of the laws on this subject, it is now the most perplexing problem with which professional accountants have to deal, and it is absorbing the thoughtful attention of many leaders of the profession. The legal and accounting ramifications of the subject are so wide that they can be barely touched upon here.

The auditor should aim to state capital stock without par

value at the net proceeds of its sale, unless the laws of the State in which the company is incorporated permit the fixing of the value at some less amount. When preferred stock without par value has been declared to have a redemption or liquidation value in excess of the amount for which it is sold, it may be stated at such value if desired by the corporation provided the common stockholders have definitely assented thereto. The valuation of common stock without par value should include the surplus only if proper action to that effect has been taken by the corporation in accordance with the laws of the State in which it is incorporated and its certificate of incorporation and by-laws. For balance-sheet purposes, however, the common stock and surplus may usually be combined provided there is no concealment of an important condition with regard to one or the other. In any case where the auditor is in doubt concerning the propriety or definiteness of the valuation of stock without par value he should insist that formal legal action on the matter be taken, if necessary conferring with the company's legal counsel on the various phases of the subject. Incidentally, accountants who have given considerable thought to this matter may well be able to offer good advice, even to attorneys, with respect to the consequences of placing certain valuations upon stocks.

Verification of shares issued.—The word "issued" as used here is intended to signify that certificates for the shares have been executed and have not been cancelled. The term "outstanding" is commonly applied to shares in the hands of the public; that is, those issued less those held in the treasury, if any.

The procedure of verification of the number of shares issued at a given date depends upon whether or not the company keeps its own capital stock records. If it does, there should be a stock ledger and a certificate book for each issue. The stock ledger should be examined the same as any other subsidiary ledger to see that the aggregate of the detail balances is in agreement with the controlling capital stock account or accounts.

The record in the certificate book consists of stubs showing the name of the holder and the number of shares for each certificate. Sometimes the stubs are signed by the holders of the certificates as a receipt. The certificate book should also

contain the cancelled certificates, attached to the stubs thereof.

The total shares issued as shown by the stubs should be drawn off. This will involve going through all the certificates from the beginning and inspecting those returned to determine that they have actually been cancelled and cannot be reissued. It should also be ascertained that no certificates have been abstracted from the back of the book. This procedure is, of course, not absolutely conclusive that no more shares have been issued than are indicated unless the stubs are signed by the holders, and even then there is a possibility that loose certificates, without stubs, may have been issued, but it is the best that can be done and there is little likelihood of any more shares having been issued, especially if the authorized issue has been exhausted. When dividends are paid, the amounts thereof furnish a check on the shares issued, except that dividends are not paid on treasury stock.

When the number of certificates is considerable, after a first audit along these lines the procedure may be simplified in subsequent audits by merely verifying the transfers. This is done by accounting for the cancellation of certificates in exchange for which new certificates have been issued as indicated by the stubs of the latter. If the total issue has increased, the additional certificates may be treated separately without going through all the old cerificates.

When the company does not keep its own stock records, the number of shares issued can readily be verified by obtaining a certificate from the registrar. In many cases the company also employs a transfer agent, to attend to the issuing of certificates. A transfer agent also is in position to state the number of shares outstanding at any time. When there is both a registrar and a transfer agent they may be the same institution or different. When there are two it seems hardly necessary to obtain a certificate from each, but there can be no harm in doing so.

Treasury stock.—Treasury stock is stock that has been issued for value and has come into the possession of the issuing company as a gift or through purchase, which latter would include any acquired in settlement of a debt. It is not definitely retired and can be sold for any amount. In some States there are legal restrictions on the purchase by a company of its own stock, such as that it may be purchased only in

settlement of a debt, or that it may be purchased only out of surplus. Restrictions on the purchase of treasury stock without taking legal action to reduce the capital are wise, because the ability to do so leaves the way open for a corporation to return capital to the stockholders to the detriment of creditors.

When treasury stock has been purchased it may be carried as an asset at cost or adjusted to par value or (in the case of no-par-value stock) declared value, depending upon the intention as to holding it. When it has been purchased below par and it is expected that it will be resold, no good purpose is served by writing it up to par, and it should be carried as an asset at cost. On the other hand, if it is regarded as virtually retired—although not definitely so, as that involves an amendment to the charter—the book value should be adjusted to par or declared value and should be deducted in the balance sheet from the stock issued.

When treasury stock has been donated, it may be carried until sold at a nominal value, which may be credited to surplus; or at par or declared value, or an amount for which it may be sold, which should be credited to a reserve. As the donated stock is sold, the proceeds should be credited to a special surplus account, designated by some such title as Donated Working Capital or Surplus Arising from Sales of Donated Capital Stock, and any amount previously credited to a reserve, as above, transferred thereto. Some writers on the subject maintain that the book value of property acquired for the stock when originally issued should be reduced by the amount realized from the sale of the stock. This is undoubtedly logical, but in the opinion of the author an auditor has no right to do so without the consent of the directors of the company, as it would have the effect of discrediting the valuation placed upon the property by the directors.

Certificates for treasury stock should be verified as to possession the same as any other securities owned. This matter has been discussed in more detail in Chapter XI (page 197).

Surplus.

Under this head will be discussed the accounts representing the excess of assets over liabilities (including capital stock and reserves) of a corporation, or the reverse, that is, a deficit.

The discussion will comprehend earned surplus, however designated—it may be, for example, undivided profits—and surplus representing capital contributions or arising from valuation or revaluation of assets.

Earned surplus seems to require very little comment, except to say that it should be in fact earned if it is to be shown in the balance sheet in such a way as to give the impression that it has been. In the opinion of the author, which is shared by perhaps most prominent practitioners, the public should be justified in assuming that the designation "Surplus," without qualification, means earned surplus. When it is desired to differentiate earned from unearned surplus, the former may be designated as Profit and Loss Surplus, Surplus from Operations, or Earned Surplus; and the latter as Capital Surplus, or, preferably, be described so as to indicate its source, such as Surplus from Revaluation of Plant Property.

There is considerable difference of opinion regarding the propriety of including in earned surplus that representing profits from sales of capital assets. It seems that a position to the contrary could not be sustained by an auditor, as such profits undoubtedly constitute realized gains. They should, however, always be disclosed in a statement designed to show the change in surplus during a period. It is incumbent upon a prospective lender or anyone else who may be interested to analyze the past operations in forming an opinion regarding the continuance of profits.

A premium on an original issue of capital stock should be carried as capital surplus. There should be no objection, however, to regarding as earned surplus a premium on the sale of stock of an established company, as the premium merely equalizes the equities of the old and new stockholders and is unquestionably subject to distribution as dividends. Any such distribution will be shared in by the old and new stockholders alike. To be sure, the entire amount paid in by the new stockholders is additional capital of the corporation, but only in the sense that the equity of the stockholders represented by net worth is always capital. As a practical matter, it must be recognized that the premium is distributable, no less than the previously existing surplus, when the corporation has the funds available for distribution, and that the treatment of the pre-

mium as capital surplus might result in creating a profit and loss deficit by paying out the available funds as dividends.

In this matter, as in many others, the auditor may counsel conservatism but should not take a position based upon technicalities which is contrary to the practical aspects of the situation. As has been stated with regard to profits from sales of capital assets, a credit to profit and loss for premiums on sales of stock should always be specifically shown in the auditor's report.

When capital stock without par value has been sold for a price in excess of its declared value, at which it is carried in the accounts, the excess should be carried to a capital surplus account, or at least it should be indicated in the balance sheet that the surplus includes such amount.

The subject of surplus arising from valuations or revaluations of capital assets, at the time of purchase or later, has already been discussed at considerable length in connection with land, buildings, and equipment, and good-will, in Chapters XII and XIII (pages 227 and 242), respectively. It should be remembered that special surplus accounts representing appreciation of asset values are subject to reduction on account of depreciation, depletion, or losses on retirements; also that the logical method of disposing of such surplus accounts, and one that constitutes a test of their justification, is to declare stock dividends to the amount of the credits to the accounts.

CHAPTER XVI

OPERATING ACCOUNTS

This chapter is devoted largely to discussion of the systematic verification of the accounts generally described as income and profit and loss accounts. Thorough verification of these accounts is usually undertaken only in connection with a complete audit, but it is necessary to give some attention to them in a balance sheet audit.

In any audit, other than a special examination for some purpose not involving the operations, the least that should be done regarding the items finding their way into the profit and loss or surplus account is to determine the description or classification of such items as shown by the books. This may be done by drawing off a trial balance of the general ledger before closing, usually supplemented by analysis of the direct charges and credits to the profit and loss or surplus account, and possibly to some other accounts when the classification is not sufficiently detailed to afford an intelligent idea of the constituent items.

Examination in Balance Sheet Audits.

After the operations as shown by the books have been determined in reasonable detail, in a balance sheet audit it is necessary to subject the operating accounts to only such detailed examination as is required in connection with the verification of whatever asset or liability accounts may be related to or affected by the operating accounts. In a balance sheet audit there is, of course, no systematic verification of the original records of income and expenses, and whatever verification of the operating accounts is made proceeds from the examination of specific entries in the accounts themselves. It is thought that in the detailed discussion of the verification of asset and liability accounts in the preceding chapters the attention that needs to be given to the operating accounts for the

sole purpose of verifying the respective asset and liability accounts has been indicated to such an extent that the matter requires no further detailed consideration.

An auditor is not usually justified in rendering a statement of income and profit and loss in his report when only a balance sheet audit has been made, unless the statement contains a qualification to the effect that it has been prepared from the books without complete verification. When a client requests such a statement he is usually willing to incur the comparatively little additional expense involved in making a complete audit or at least in making sufficient tests of the operating accounts to permit the auditor to assume responsibiliy for the statement without necessarily auditing the cash transactions.

Examination in Complete Audits.

A complete audit involves systematic examination of the original records with respect to charges and credits affecting operations—whether arising through the movement of cash or otherwise. The examination of the original records is, of course, made effectual only by tests, at least, of the postings and footings of all the accounts. Further, in the verification of the asset and liability accounts considerable attention is necessarily given to some of the important operating accounts. When all these steps have been taken there is nothing more that need be done in the verification of the operating accounts unless it is desirable to analyze the accounts for the purpose of expanding the classification of items in the report or of ascertaining the causes of apparently inordinate increases or decreases as compared with prior periods or of fluctuations within the period.

The charges to expense accounts, for example, may all have been determined to be proper by examining the supporting vouchers and tracing the charges to the respective accounts, but the aggregate of a certain class of expenses for the current year may be found to be considerably in excess of that for the preceding year without a corresponding increase in income; or it may be that in such an account as salaries or rent the charges for one month are greatly disproportionate to the others. All such matters should receive the attention of the auditor as far as practicable.

There are cases where the classification of operating accounts is so meager that no intelligent statement can be prepared nor study made without extensive analysis. When such conditions exist the auditor should at least recommend that the accounting system be revised. Whether or not he should proceed with the analysis of the accounts in order to present an informative operating statement and comments thereon depends upon the conditions in each case with respect to the magnitude of the undertaking, the available time, and the arrangement regarding fees. If the condition of the accounts and the limitation of the scope of the work are such that the auditor cannot report on the operations to his satisfaction he should protect himself by a comment in his report.

It is almost always desirable, from the standpoint of the reader of an audit report, that statements of operations, as well as balance sheets, be made comparative. The only exceptions are where the classification of accounts or important conditions affecting the business have changed so materially that comparisons are meaningless and where the client for some reason does not wish to disclose to others the results of previous operations. Whether or not a comparative statement of operations is to be included in the auditor's report, he will do well to prepare one for his papers or at least to compare his statement for the current period with that for the next preceding period—assuming, of course, that the operations are really comparable—for the purpose of detecting any errors in classification or matters which may advantageously be brought to the attention of the client.

The extent to which detailed statistical data (ratios, averages, et cetera) should be compiled by the auditor, either for inclusion in the report or for his own study, depends upon the circumstances in each case. Such information may be furnished to the executives by the office staff or they may not desire to incur the expense for its compilation. In any case, however, the auditor should be alive to whatever possibilities there may be in this respect.

Professional auditors are in a position to render very valuable service to their clients with comparatively little extra effort, having completed an audit, by studying the conditions disclosed by the financial statements—balance sheets and operating statements—and reporting their observations. Perhaps

the majority of auditors take the narrow view that it is their function to report facts only and let the clients draw their own conclusions. To be sure, many clients do not encourage their auditors to offer advice and assistance in connection with their business problems, and some deliberately discourage it, but the great majority will welcome any tactful comments of an interpretive or constructively critical character. This subject will be discussed in the final chapter with more particular reference to its specific application.

Although the auditing of all operating accounts has been covered in a general way, there are some accounts or classes of accounts whose distinctive features may well be discussed individually. The remainder of this chapter will be devoted to amplifying and particularizing what has been said elsewhere in one connection or another regarding certain of the operating accounts.

Sales and Other Income.

The verification of income from sales has been discussed at considerable length in Chapter IV under the head of "The Sales Record," and is touched upon in connection with the auditing of accounts receivable (Chapter IX) and merchandise (Chapter X). It is thought that these discussions furnish material for a definite and complete program of audit of the principal source of income of a manufacturing or trading concern; namely, sales of commodities.

In the verification of income accounts generally, all clues as to sources of income should be followed up and all available means of independent confirmation should be utilized. It is incumbent upon the auditor to study the conditions in each case and to discover and make use of any possible means of verification from collateral sources. The necessity for, and means of, utilization of sources of information regarding income outside of the income accounts themselves are suggested, although not exhaustively treated, in the following pages.

Commissions, fees, etc.—There are many concerns which derive a considerable, if not the principal, part of their income from commissions, fees, and the like. Such are brokerage houses, real estate agents, factors, contractors doing business on a cost-plus basis, trustees, and fiscal agents. In the

audit of the accounts of such concerns as these adequate tests of the income of this character should be made by examining the records showing the business handled. These records may be in any form; in fact they may be so crude that they cannot be accepted as wholly reliable, but they should be utilized to the fullest possible extent in an effort to determine, by tests, that the income receivable has all been accounted for.

Revenue of hotels, restaurants, etc.—In the auditing of hotels, restaurants, hospitals, and similar institutions, consideration should always be given to the internal check, if any, on sources of revenue, and the degree of detail to which the verification of the revenue is carried should be governed accordingly. If there is an internal check on the revenue from rooms of a hotel, for example, it will probably be unnecessary to do more than test the footings and postings of the record of charges to guests, but if the system in effect appears not to provide adequate protection against fraud or serious error it may be desirable to make test examinations as far back as the register of arrivals and departures.

The same principle applies to the revenue from meals and from the various other sales and service departments of an institution. It is almost always impracticable for a professional auditor to examine the detail records of all operations, but enough should always be done so that there can be reasonable assurance that no income has been diverted from the proper channels and that considerable losses from errors are unlikely. It is generally recognized that hotels and restaurants are especially in need of adequate internal control over revenue.

Revenue of public utility companies.—In auditing the accounts of steam and electric railroads, steamship companies, bus lines, express companies, gas and electric companies, et cetera, it is very seldom practicable to extend the examination of revenue accounts to the original records, although in some cases tests may be made of daily reports of conductors and other agents charged with making collections. Here again, the auditor should inquire into the system of internal check and study the conditions generally, although in the audit of large companies he is seldom expected to do more than examine the records in the general office.

The auditing of operating revenue of such companies is usually limited to tests of the entries in the general accounts,

examining the documents in support thereof and d[illegible]g whether it appears that proper responsibility is taken by those concerned and that no usual source of revenue is omitted. These tests of revenue are, of course, supplemented by the examination of records in support of cash receipts.

Revenue of publishers.—A good check on revenue of a publisher from advertising may be obtained by inspection of the advertising matter actually appearing in a few issues of the publication. The revenue from sales should be susceptible of proof from the records kept by the subscription department and reports of shipments and returns.

Rentals.—The basis of the verification of income from rentals is the record of property owned from which revenue is expected to be derived. Each unit of such property—building, apartment, suite, or room—should be accounted for as producing revenue, or the reason for its being unproductive should be ascertained to the satisfaction of the auditor. It is usually desirable to examine the leases. If the renting is handled by an agent his reports should be examined, or at least part of them.

Revenue of schools.—In auditing the accounts of educational institutions a reliable record in support of the principal income is usually available in the form of a record of registration and attendance. This is, however, not absolutely conclusive unless it is kept by a person who is not concerned with the receipt of cash. Most resident schools publish a list of students which may be accepted as authoritative with minor corrections.

Membership dues.—The same principles apply to the verification of the income of a society or association from membership dues as to the income of a school. There is always some record of the membership, and usually a published list, which may be utilized by the auditor.

Contributions.—In determining whether contributions to religious, eleemosynary, and educational institutions have all been accounted for, recourse should be had to published reports, records of subscriptions, copies of receipts issued, if any, and reports on file from solicitors and others covering collections in currency. Published acknowledgments constitute the most reliable source of information. Carbon copies of receipts, while inconclusive, should not be disregarded. Large

contributions will probably be mentioned in the minutes of the governing body.

In all such matters it should be the aim to obtain a record which has been made by some person other than the one who is directly responsible for the custody of the cash.

Revenue of commissaries, etc.—Business concerns frequently operate restaurants, commissaries, and similar facilities for the benefit of their employees but at some cost to them. There have been cases where the receipts from such operations have been misappropriated and the auditor would not have been aware of the existence of the facilities and the revenue therefrom if he had not given close attention to the vouchers for disbursements and discovered that expenses were incurred for those purposes.

The foregoing is cited only as an example of many conditions under which the only clue to incidental revenue of a business may be furnished by the examination of vouchers.

Unclaimed wages.—Any concern employing unskilled labor to any considerable extent, and even some others, may be expected to have unclaimed wages. In the auditing of most manufacturing, mining, railroad, and public utility companies the auditor should therefore regard with suspicion the failure to account for such wages and should undertake an investigation. As previously stated, unclaimed wages should be treated as liabilities for a time.

Interest.—Information with regard to the income from interest which should be accounted for is derived from the examination of the asset accounts of securities owned, notes and acceptances receivable, special accounts receivable (loans and overdue accounts), and bank balances. Each item of interest-bearing securities and receivables should be compared with the credits for interest income, except that where the notes, et cetera, are numerous some tests should suffice.

It is often practicable to test the interest on notes receivable, for example, by averaging the principal throughout the period and computing the interest thereon. If the result is approximately the same as the amount credited to the income account no further examination should be necessary. Interest which is doubtful of collection should not be accrued and taken into income unless a reserve of the same amount is concurrently set up. It is usually desirable to mention in

the report any interest-bearing assets on which interest is in default. This may not be regarded as necessary, however, if both the auditor and the client are fully conversant with the situation.

Interest coupons will usually be paid on securities of a company held in the treasury, and will always be paid on sinking fund securities if they are kept alive and held by the trustee. It makes little difference whether such interest is taken into the accounts as income or is credited to the account with which the payment is charged. As to securities in a sinking fund, if there is a sinking fund reserve the interest collected by the trustee will be credited to the reserve, directly or indirectly. Regardless of the accounting procedure, the auditor should see that the net amount of interest paid corresponds to the principal of the securities outstanding in the hands of the public.

There is little likelihood of failure to account for interest on bank balances, as it is nearly always credited by the bank and not paid directly. However, where the bank balance has been considerable during the period, and interest is allowed by the bank, it is well to see that periodical credits have been taken up on the books. The reconcilement of the balance at the end of the period will disclose whether there are any credits by the bank which have not been entered on the books. Unless the interest-bearing bank balances are unusually large it is seldom worth while to verify the computations of interest.

The subject of interest on bank balances frequently affords an opportunity for helpful advice by an auditor to his client. Sometimes large amounts of cash are carried in current checking accounts without interest when the bank could be induced to allow a low rate of interest; and sometimes the amount thus carried subject to check is materially in excess of normal requirements and a considerable part might at times be set aside in a special account, perhaps represented by a certificate of deposit, at a higher rate of interest.

As the record of an interest-bearing asset is an indication that interest should be received, so also a record of the receipt of interest is evidence of an asset. There have been cases where unrecorded assets have been discovered by observing the receipt of interest. The interest account or ac-

counts should always be analyzed in sufficient detail to disclose at least each class of interest-bearing asset, and sometimes each item.

Dividends.—Dividends receivable are indicated by the stocks owned. If it is found that no dividend on a certain stock has been received an effort should be made to determine whether or not the dividends are actually in default. In any doubtful cases the matter should be mentioned in the report.

Dividends should not usually be accrued, but be taken up as credits to income when collected. Some dividends may properly be credited, in whole or in part, to the investment account rather than to income. Such are liquidating dividends and dividends of subsidiary companies which represent a return to the parent company of part of the cost of the stock.

There should be no income from treasury stock, as dividends should not be paid on such shares.

Cash discounts.—Aside from tests of the footings and postings of the original record of cash discounts on purchases, some investigation should be made with a view to determining at least the general practice with regard to the taking of available discounts. The concern may or may not be in financial condition to discount its bills. If it is not, there is nothing for the auditor to do unless, as is sometimes the case, he can point out to the client that it would be advantageous to borrow money in order to take discounts. If discounts are usually taken the auditor should investigate some of the outstanding cases where they were not taken for the purpose of ascertaining the reason therefor. Any failures to take available discounts through mere negligence should be reported.

Cash discounts are allowances at reasonable rates solely for payment of bills within a certain period, as distinguished from trade discounts, which are usually deductible without regard to the credit terms. There are two opposing views regarding the nature of cash discounts. Some accounting practitioners and writers contend that cash discounts on purchases are properly classed as financial income, and, conversely, cash discounts on sales as financial expense, which means essentially that they apply to the period in which payment and collection are made. Others contend that they are

direct deductions from the price of the goods, and therefore should be applied in the period of purchase and sale, respectively.

The latter principle involves the accrual of discounts receivable and allowable at the end of the period, those on purchases being credited to income and those on sales being charged thereto, unless the purchases and sales have already been reduced in the original entry, with respect to discounts deductible, which is seldom done. This principle also involves the reduction of charges to capital asset accounts by the amount of any discounts taken on the bills for purchases.

This subject is discussed at length in several works on accounting theory and it would be inappropriate to do so here. As previously stated, the author is disposed to favor the theory that true cash discounts—as nearly as the term may be applied—are in the same category as interest; that they affect the payment and receipt of cash and not the purchases and sales. As for discounts on purchases of capital assets, it has already been pointed out that all credits for discount and interest during a construction period should be applied in reduction of cost as offsetting expenses preliminary to operation; and any cash discounts on such purchases in a later period are certainly negligible in amount. In an appraisal of two similar properties no consideration is ever given to the possibility of the value of one being less than that of the other by reason of materials having been used in one which were purchased at a cash discount whereas the financial condition of the builder of the other was not such as to permit him to take cash discounts.

Acceptance of this view involves disregard of accrued cash discounts on purchases and on sales. It is necessary, however, to take into consideration any large discounts, say over two per cent for ten days, which are practically trade discounts although they may be stated to be cash discounts.

As to the verification of cash discounts on sales, all that need generally be done is to test the footings and postings of the original record and determine—usually by a glance—that the totals are in about the proper proportion to the cash receipts from customers. It is thought that detailed examination of such allowances need not be undertaken unless the aggregate is disproportionate. Any irregularity in con-

nection with discounts deducted by customers in settlement should be detected in the auditing of cash receipts and disbursements.

Profits and losses from sales of securities, property, etc.—When investment securities, plant property, or other assets are sold, outside of the regular operations of the business, a detailed investigation should be made into all phases of the transaction and covering all accounts affected. While the determination of the profit or loss from such a sale affects income, or at least the profit and loss account, it also affects the particular asset account, and the examination should usually be primarily directed to the latter.

It is necessary to determine the book value of the property sold, and possibly the amount of a reserve carried against it. It may also be necessary to determine that the price for which the asset was sold is in accordance with agreement; this depends upon the relative importance of the amount involved and the circumstances in the particular case as to the possibility of irregularity. Consideration should always be given to the apparent reasonableness of the sale price; for example, the sale of an automobile for $100 which cost $1000 within a comparatively short time should arouse suspicion that the sale was irregular. Any sales of assets to officers, employees, or other friendly interests should be closely inquired into and usually brought to the attention of the proprietor or highest executive. When units of plant property—machinery, for example—are replaced, as evidenced by charges to the asset accounts, it is pertinent to inquire into the accounting for the proceeds from salvage or trade-in value of the property replaced.

When partial sales are made from blocks of securities, real estate, and so forth, the profit or loss from such sales should be taken up if there is any reasonable basis for its determination; and there nearly always is. There is a tendency in such cases to credit the proceeds of partial sales to the asset account and make no adjustment for profits or losses until the whole block is disposed of. Frequently an aggregate of the same kind of asset is regarded as an indivisible unit when it is merely a group, the cost of any part of which may readily be ascertained. When units of a block have been

acquired at different prices, in computing the cost of a unit for the purpose of determining the profit or loss from its sale it may be proper to use the earliest cost or the average cost of the block, depending upon various conditions, but in perhaps most cases the average cost is the better basis.

Inter-department and inter-company operations.—In auditing the accounts of a concern which operates branches or departments at a remote distance, it is often deemed impracticable to devote the time and incur the expense necessary to examine the local accounts at those points. The decision on the part of the auditor regarding the extent to which he should accept unaudited reports of local representatives, without qualification in his report, demands the exercise of good judgment.

The relative importance of the amounts involved and the probability of error or intentional misstatement, in view of the degree of accounting and physical control maintained by the main office, should be given more weight than the academic principle that all accounts should be verified. The auditor should at all times aim to impress his client with his practicality. If, in view of all conditions, he is not satisfied with the available evidence regarding the detail accounts at outlying points, he should endeavor to obtain permission to extend his audit so as to include them; failing that, he should properly qualify his report.

Inter-department and inter-company profits, that is, profits made by one department or company on sales to another in the same group, should usually be eliminated in consolidating the accounts of a company or group of affiliated companies. This may be especially important in connection with the valuation of merchandise on hand which has been purchased from another department or affiliated company at a profit to the seller.

This principle also involves the elimination of any profits taken up by one operating unit on sales of capital assets to another. To do this it is necessary to reduce the book value of the asset in the consolidation. Care should be taken, however, to recognize any depreciation of the asset based upon the augmented cost, which would reduce the adjustment on account of the profit taken on the sale of the asset.

Expenses and Other Charges.

In the following pages will be discussed such classes of charges against operations as seem to require any special mention.

It may be said generally that charges to expense accounts and other charges against income and profit and loss should be watched carefully for indications of further charges of the same character or of liabilities which should be recorded; and any such clues should be assiduously followed up. Such clues are usually furnished by the vouchers, which, as previously stated, should be examined with great care, but they may be furnished by analysis of the accounts. Examples of such charges are a payment on account of a claim against the concern; payment of legal expenses in defending a suit which may result in a judgment; and interest paid on unrecorded indebtedness. Further, the examination of expenses, when properly co-ordinated with the auditing of the other accounts, may serve to call attention to income which has not been accounted for, such as has been mentioned in connection with the operation of restaurants and similar auxiliary facilities for employees.

Deductions from sales.—The classes of items falling in this category are returned goods and containers, price allowances, freight allowances, trade discounts (when not deducted from the sales invoices), and any other similar credits to customers. These items may be recorded in the cash book, as representing deductions by customers in settlement, in the journal, or in special records. The method of recording is immaterial, as far as the auditing principles are concerned; all such charges against operations should receive the same degree of attention as is given to vouchers for cash disbursements.

It is especially important that credits to customers for returns and sundry allowances be properly authorized by someone in authority, and adequate tests should be made to see that this has been done. Further, returned goods and containers should be given no less attention in the accounting and auditing than purchases of goods, being subject to the same approval as to acquisition and cost and to the same necessity of properly accounting for the goods acquired. The

accounting system in this latter respect should be inquired into. In this connection, consideration should be given to the valuation of defective goods and containers which have been returned and are on hand at the date of the inventory, in order to see that none is overvalued.

As to allowances for freight, trade discounts, and the like, the least that should be done is to inquire into the office procedure to see that proper control over and verification of such claims by customers is exercised. If the internal safeguards appear to be inadequate the auditor should use his judgment, in view of the volume of transactions and any limitation of the scope of the audit, as to whether he will proceed to test the allowances or will merely report the laxity in office procedure. As a rule the office force is much better qualified to pass upon such claims expeditiously than is the outside auditor.

Goods purchased.—It is thought that the subject of cost of merchandise, materials, and supplies has been fully covered in connection with the discussion of purchases (Chapter V) and the valuation of inventories (Chapter X). It may, however, be well to repeat that the auditor should always investigate the workings of any cost and perpetual inventory records there may be, in connection with the determination of accurate costs and inventories.

Other reasons for investigations of this character, and for inquiry into the method of physical control over the stock as well, are to ascertain whether or not the business is being safeguarded as well as possible against loss in fixing sale prices and from fraudulent or negligent failure to account for goods, on the part of employees, consignees, or others. Auditors frequently are afforded great opportunities for service to their clients in recommending methods of physical as well as accounting control over stocks of merchandise of all kinds.

Salaries and wages.—The verification of salaries and wages involves the same auditing processes as for any other disbursements; namely, proving that the disbursement was actually made as recorded, that it was approved by the proper authority, and that the amount of the indebtedness thus discharged was properly computed. The only essential difference in the case of pay-rolls is that it is not always necessary

to determine that the disbursements were made to the individual recipients shown by the records, as it may suffice to prove the payments in total.

Pay-roll disbursements may be made by check or in currency, but salaries, at least those of officials and higher employees, are nearly always paid by check. In a concern of considerable size there is usually a separate pay-roll for salaries of officials, office employees, salesmen, et cetera, as distinguished from the employees receiving so-called wages. The distinction between salaries and wages is clear in a manufacturing concern, but may not be so clear in other classes of businesses; as a matter of fact it is not in the least important except as to the possibility of difference in auditing procedure between the two classes of pay-rolls.

Salaries paid by check should be tested by comparison with the paid checks. Whenever the number of employees thus paid warrants the preparation of a separate pay-roll record, it should bear the approval of an official, except that salaries of officers of a corporation, and perhaps of some of the higher employees, should be approved by the board of directors, as evidenced by the minutes of its meetings. When the pay-rolls are entered in the cash book or voucher record in total only, the footings of the pay-rolls should be tested and the entries therefor checked, as in the case of any other vouchers.

The auditing of pay-rolls other than for salaries as above described is not subject to quite such definite rules, except as to approvals, footings, and checking against the book entries. As to the evidence of the proper disbursement of the cash, much depends upon the number of employees and the method of disbursement.

When there are comparatively few employees and the payments are made by check, or receipts are taken for payments in currency, the disbursements may be verified in detail. When, however, there are many employees there is likely to be a well regulated system of paying and if, after investigation of the system—which should always be done—the auditor is reasonably satisfied that the interests of the concern have been properly safeguarded, he is usually justified in accepting the pay-roll itself as evidence of the disbursement of the cash.

There are two features to be considered in connection with pay-roll systems when payment is made in currency; namely,

the preparation of the pay-rolls and the handling of the cash. The pay-rolls should be prepared by persons who do not have access to the cash at any time. The disbursing of the cash should always be witnessed, to guard against "padding," that is, the inclusion of fictitious names in the pay-roll by foremen or others who may seek to draw the cash themselves or through accomplices. Each employee should be identified to the paymaster in some manner.

Whether or not receipts are taken is largely a matter of policy; it is not usually worth while to do so merely to prove payment, but when deductions are made or it is desirable to notify the employees in advance of payment regarding the computation of their wages it may be well to furnish them with slips with stubs to be detached which will serve as identification and acknowledgment of receipt.

The examination of pay-rolls is usually limited to footings unless it appears that insufficient care has been taken in their preparation by the office force or unless the engagement calls for more extensive examination, when the computations may be tested, or the time and rates may even be checked to the time tickets, employment cards, or other original records. If any such detailed examination of the pay-rolls appears to the auditor to be necessary he should usually report the condition to the client before proceeding with the work.

Detailed verifications such as these can usually be made much more economically by the office force than by professional accountants, and the auditor will do well in all such cases to recommend to the client that he have the office force do the work, if necessary employing additional clerks for the purpose, rather than incur the expense of having it done by the auditor's staff. However, any apparent lack of care in the office procedure which leaves the auditor in a state of uncertainty regarding the accuracy of the accounts or the possibility of fraud should be commented upon in the audit report. It may be said in this connection that criticisms of methods by the auditor should in nearly all cases be constructive, and not merely such as to relieve himself of responsibility.

In the case of weekly pay-rolls, it is usually necessary to accrue the salaries and wages from the last pay-roll date in the fiscal period. This may be disregarded if the amount

involved is small or if the accounts are consistently kept upon a cash basis, unless the cost of the labor is reflected in the valuation of manufactured or partly manufactured goods on hand at the end of the period.

Inasmuch as practices differ with respect to the drawing of salaries by proprietors and partners, it is desirable to show separately in the income statement such salaries as are paid and treated as business expenses, for the information of any outsider who reads the report. If the report is to be used in connection with the sale or incorporation of the business, and salaries are not paid to the executives, that fact should be pointed out.

Commissions.—The auditing of commission expense involves, in addition to the usual processes of verification of vouchers, inquiry into the method of computation in relation to the sales on which commission is paid, for the purpose of determining that due precautions are taken against overpayments; as a matter of procedure it may be assumed as to all such expenses that underpayments will be detected by the payees. Whether or not any detailed verification of computations is made will depend upon the apparent care given to the matter by the office force.

It is often desirable to give special attention to the adjustment of commissions with respect to credits to customers for returns and allowances. When commission rates are uniform, or approximately so, it is usually practicable to arrive at a fairly satisfactory verification of the total commission on sales for the period by applying the uniform or approximately average rate to the total net sales.

In conjunction with the review of methods and tests of computations, consideration should always be given to accruals of commissions. In determining the amount of any such liabilities it is necessary only to follow the procedure adopted in verification of the amounts disbursed.

Traveling expenses.—Vouchers for traveling, subsistence, and entertainment expenses of salesmen and others, including officers of a corporation, should be supported by reports in reasonable detail. These reports should be signed by the person responsible for the cash and incurring the expense and be approved by an executive. Failure to observe these requirements should be reported by the auditor.

Interest.—The account or accounts representing interest expense should be analyzed sufficiently to determine the interest paid on each class of obligation; and in the case of notes and acceptances it is usually desirable to segregate the interest on each individual obligation. There is a reciprocal relation between interest expense and interest-bearing liabilities; each should be used as a check on the other, so that it may be known that all liabilities on account of principal and interest are disclosed.

The analysis and proof of interest may usually best be done as supplementing the analysis of the accounts representing interest-bearing liabilities. The computation of accrued interest may also be made at the same time.

Income taxes.—It is necessary that great care be exercised in connection with income taxes. If the auditor does not himself prepare the tax returns after auditing the accounts he should examine them to see that there is no likelihood of additional taxes being assessed upon review of the returns by the Federal or State departments. Conversely, while a professional auditor must adhere to the most scrupulously ethical principles in connection with taxes, and must do nothing which may be construed as countenancing improper evasion thereof, he should not overlook any opportunity of rendering real service to his client by pointing out overstatements of income or other errors in tax returns whereby the client is paying excessive taxes. Moreover, in any doubtful case of accounting or legal principle involved in the preparation of tax returns the auditor should serve his client in every legitimate way.

Uncollectible accounts, etc.—Journal entries writing off accounts, notes, and other receivables should be approved by an executive of the concern. If this has not been done the auditor should usually request that it be done at the time of the audit; or if such subsequent approval is impracticable, should examine correspondence files and any other available data in connection with some of the larger items at least. When the matter is not receiving proper attention from the executives, and especially when the auditor cannot readily assure himself of the propriety of writing off the accounts, he should mention the matter in his report, perhaps detailing the receivables written off, so that all the facts will be brought to the attention of the executives.

Donations, etc.—Any donations of considerable amount, whether of cash or other property, should be authorized by the higher executives; for a corporation it is reasonable to expect that the larger items will be sanctioned by the board of directors. This requirement as to approval applies equally to pensions and large expenditures for advertising or publicity. In other words, the auditor should receive assurance that all extraordinary expenditures, that is, those for which no direct return is received, are made under the highest authority which would reasonably be expected to have jurisdiction over such matters.

It is especially important that approval of the highest possible authority be given to any expenditures which appear to the auditor as inconsistent with the requirements or objects of the concern, or the legality of which may be questioned. It is seldom that information with respect to any disbursements savoring of irregularity is shown openly in the records, but not infrequently large amounts are paid to officials for confidential purposes and not accounted for by them in detail.

When an auditor is confronted with such conditions as these he must exercise the greatest caution. He should not, of course, insist upon divulging any information in his report that may properly be kept secret by the client, but he must make certain to the best of his ability that all expenditures are such as would be approved by those whose interests are paramount. Moreover, he cannot afford to put himself in the position of concealing an illegal or questionable act. There have been many cases where auditors have withdrawn from engagements rather than render reports, at the insistence of their clients, which would fail to disclose conditions of which the auditors were apprised or were suspicious.

Distributions of profits.—The term "distribution of profits" is generally understood to mean the division of profits among the owners of a business, whether in the form of disbursement of cash, or other assets in lieu of cash, or of credits to the owners' accounts. As to corporations, distributions are usually synonymous with cash disbursements, as action is seldom taken to assign to the stockholders individually their share of the profits until the corporation is in position to part with the funds representing the profits. Dividends are,

of course, set up as liabilities to the stockholders in the aggregate when declared, in advance of actual payment.

As to partnerships, the auditor need only ascertain that the distribution of profits as shown by the accounts is in accordance with the partnership agreement. As to corporations, it is thought to be seldom necessary for an auditor to verify the detailed distribution of dividends to stockholders. He should determine that all dividends are properly authorized by the board of directors and that the total of each dividend paid is in accordance with the authorization and the number of shares outstanding. There may, of course, be cases where, because of the general lack of regularity of procedure, or for some other special reason, it is desirable to determine that the amount paid to each stockholder is in conformity with the number of shares held by him at the effective date of the dividend.

With the exception of dividends which are stated to the stockholders as being in liquidation, and which are chargeable in whole or in part against the capital stock, or against a reserve for depletion or amortization (which is sometimes done by mining companies, et cetera), dividends should be paid only from profits. What constitutes profits in this connection is often a debatable question. The auditor should always take the position that there can be no profits available for dividends until provision has been made for all known losses, including a reasonable allowance for depreciation and provision for doubtful receivables. It is not good business to pay a dividend from a book surplus representing unrealized appreciation of property values, unless the appreciation clearly constitutes merely an adjustment of excessive depreciation in the past; but it may be legal to do so in the State in which the corporation is domiciled.

In doubtful cases the auditor should remember that he is engaged to further the interests of his client in every legitimate way possible. If the payment of a dividend has impaired the capital he should assist the client in an effort to discover some proper means of increasing the credits or reducing the charges to surplus. Whenever there may be a conflict between the strictly legal and the accounting or business phases of a situation he should hesitate to put himself on record in his report as to the propriety of the payment of

a dividend, but should merely report the facts in such a manner that they cannot be misunderstood. If, however, there is evidence of gross mismanagement, or of an attempt to influence the market value of the capital stock of the corporation by paying a dividend, and there can be no doubt of the impropriety of the payment, the report should be very explicit on the subject.

CHAPTER XVII

THE REPORT

The conclusion of an audit engagement, consisting of the preparation of the report, is by no means the least important and difficult part of the work. Its importance is readily understood when it is realized that in the great majority of cases the client receives his permanent impression, if not his only impression, of the quality of the auditor's work from the report. It behooves the auditor, therefore, to devote the most painstaking care to the final steps of his work.

The subject of the preparation of reports is a very large one. It has engaged the most thoughtful attention of many practitioners, including the author, for years. From his specialized experience the author has gleaned material for a book exclusively on the subject of Accountants' Reports, and he believes that with this work available, and in view of the magnitude of the subject and the danger of generalizations on the technical phases, it is unwise to attempt to do more within the limitations of this volume than to discuss a few of the broader principles.

It should be understood at the outset that what is meant by an audit report is everything formally submitted by an auditor to his client as relating to the execution of his engagement. This may be merely a letter or may be voluminous statements and text matter.

Composition of the report.—In the preparation of a report, no less than in the general conduct of an audit, the auditor should be actuated at all times by the desire to render real service to his client. To do so it is necessary to include in the report everything that is appropriate in the particular case, in view of all conditions which may be known or surmised, and no more. Notwithstanding the desirability of standardization of some features of reports there should be no complete uniformity in reports for any considerable num-

ber of clients. While certain general standards as to content and form may be adopted for reports on complete audits or balance sheet audits there may be peculiar conditions in any case which make a radical departure therefrom desirable.

It is almost always practicable for an auditor to determine, from his knowledge of purposes and conditions or from the expressed wishes of his client, to what degree of detail the report should be carried. In this respect, as in all others, he should be governed by the most scrupulous ethical principles and should not spend his time in the preparation of statements and other matter which may be of doubtful value to the client. There are cases where clients do not want statements at all, but merely comments on conditions. On the other hand, the auditor should not stint himself in giving the client the benefit of any knowledge of the business he has derived which he believes will be appreciated. In this connection, professional auditors have considerable opportunity to educate and encourage their clients to study their business affairs through the medium of reports. It will be seen that decision as to what should be included in the report calls for the exercise of the most discriminating judgment and considerable insight into the viewpoints of the clients.

In the absence of extraordinary conditions, a report on a complete audit usually consists of a formal letter or presentation to the effect that the audit has been made, a balance sheet at the end of the period, a statement of income and profit and loss for the period, comments on the items of the statements and on general matters, and perhaps a formal certificate. The statements may be supported by detailed schedules of some of the items and may be made comparative with prior dates or periods. In most cases comparisons in statements are highly desirable.

For a balance sheet audit it is unusual to render the statement of operations unless it is qualified as having been prepared from the books without verification. There can, of course, be no uniformity in reports on special examinations.

Where the report should be prepared.—It will be found desirable, whenever practicable, to prepare the report in the office in which the auditing work is done. This obviates the possibility of failing to obtain all information needed for the report and at the same time tends to minimize the volume of

the working papers. Moreover, it is important that the report be prepared promptly upon the completion of the audit work so that all details are fresh in the auditor's mind.

Discussion with the client.—In many, if not most, cases it is advantageous to all parties concerned for the auditor to review informally with the client the draft of the report in its rough state, before typing, in order that the client may have an opportunity to suggest any desirable amplification, and that any differences of opinion may be discussed and if possible an agreement be reached. Adherence to this practice will obviate many later annoyances to both parties, and possibly serious disagreements. Further, the contact with the client at such a time furnishes an opportunity for informal discussion of the business which may be of great benefit to the client.

Rendition of the report.—The report should be rendered as promptly as possible after completion of the work. This is especially true when the audit has been made soon after the end of the fiscal period, as the report will then be interesting in connection with the current business administration. Reports should usually be rendered to individuals, on account of their confidential character.

Inclusion of accounts not audited.—It may be necessary, for practical reasons involving limitation of the scope of the work, for the auditor to include in the financial statements of his report the accounts of branches or subsidiary companies which have not been audited or have been audited by other accountants. In such a case the auditor should be governed as to any qualification in his report by the relative importance of the accounts which he has not audited and by the probability of error or fraud having been committed. If he decides that, in view of all conditions, he cannot assume any responsibility for such accounts, he should qualify his report accordingly.

Income statements.—Statements of income and profit and loss may in most respects be detailed or condensed to meet the requirements in any case. However, any considerable amounts of extraordinary credits should be shown separately so that no one will be misled into thinking that the entire income is attributable to normal operations. Examples of such unusual credits are profits from sales of capital assets, insurance recoveries in excess of the depreciated book values

of the assets lost, and amounts received in consideration of cancellation of contracts.

Any unusual expenses or losses should also be detailed so that their effect upon the operations may be seen. It is usually desirable to point out in the comments the significance of any such extraordinary items.

In income statements, and in balance sheets as well, the accounts may be adjusted to give effect to reorganizations and new financing, provided the basis for the changes is clearly shown in the report. Such adjustments may include revision of the charges for income taxes to give effect to changed tax rates.

Certificates.—In a report to be used for credit purposes especially, but not exclusively, it is usually desirable to include a formal certificate to the effect that the accounts have been audited and that the accompanying statements correctly exhibit the financial condition of the business or its operating results, or both, with any qualifications that are absolutely necessary.

Such a certificate should represent the opinion of the auditor, based upon his review, and he should be prepared to support that opinion reasonably as to each item of the statements if necessary, having regard to the fact that very few such statements are, or can be expected to be, absolutely accurate. They are at best estimates, but they should be as intelligent estimates as it is practicable to make.

Comments.—The comments are the most difficult part of the report. Decision as to what statements are to be rendered is not usually very difficult, and in their preparation practically the sole requirement is accounting technique. But the judicious selection of subjects to be commented upon, not being governed by any rules which may be relied upon as fitting the particular case, is often very perplexing to the most experienced practitioners; and having decided what subjects will be covered, the actual writing is far from easy for most auditors.

Comments, as they are usually written, may be divided into three general classes, namely: (1) those relating to verifications, covering extent and method; (2) those constituting qualifications, with respect to limitations of the scope

of the work and to items found to be incorrect, whether adjusted or not; and (3) those of an informative character.

Of these three classes, the first is generally the least important unless the report is addressed to one who is wholly unfamiliar with auditing methods or unless the work has been a special examination, when it is necessary to be very explicit as to what has been done. It is frequently desirable, however, to comment specifically on the verification of cash and other assets which may readily be converted into cash, for the purpose of expressly giving those charged with the control of such assets a clean bill of health.

It is thought that in most cases where clients are familiar with the methods of auditors, and especially where formal certificates are rendered, comments on verifications can satisfactorily be reduced to a minimum. It is highly desirable in all cases to limit the comments to essentials, so that important points which it is especially desired to bring out will not be obscured by perfunctory or trivial remarks. What is essential depends upon the circumstances in each case.

As to qualifications, it seems that nothing need be added to what has been said in the preceding chapters in connection with the auditing of specific accounts and on general subjects. It may not, however, be amiss to emphasize that the auditor should take a broad view of each situation and not expect perfection.

The third class of comments, those of an informative character, are by far the most interesting and require the greatest thought. Perhaps the greater part of such comments usually consists of detailed information relating to the items of the statements rendered, as to their composition, value, or other features. Details of items of the major statements are often presented in the comments when their number does not warrant the preparation of separate schedules.

Other information which is usually of value to the client relates to such matters as the adequacy and general suitability of the accounting system, the efficiency of the office personnel, and the adequacy of insurance protection. In deciding what general information is to be given in the comments consideration should always be given to the purpose for which the report is to be used. Under certain conditions

it may, for example, be advisable to outline the history, organization, and personnel of the concern, whereas under ordinary conditions information of this character would not be appropriate. The same applies to information regarding such matters as unfilled orders and contracts in force, and to remarks concerning errors and adjustments.

Criticisms should always be constructive. If auditors were always to observe this principle there would be fewer criticisms of accounting systems and business methods generally and such criticisms as were made would have real value. It is not a violation of this rule, however, for an auditor merely to recommend that consideration be given to a certain condition with a view to its improvement. It is rather seldom that an ordinary audit affords opportunity for sufficient study of any but the simplest accounting system or business organization to enable the auditor to form any well considered conclusions. It is, therefore, entirely proper for him to state that certain methods appear to be faulty but that the time that could be devoted to the subject did not permit of the exhaustive investigation that would be required to form a definite opinion.

In perhaps the majority of engagements auditors have a wonderful opportunity to serve their clients by furnishing information in the form of analysis and interpretation of financial statements and business advice. Among the many matters that may be commented upon are the following: the progress of the business with respect to profits and liquidity of assets; the investment in merchandise and receivables in relation to the volume of business; comparison of the ratios of various assets and of profits with those obtaining in similar industries (of course without naming the other concerns except as the data may be compiled from public records). Further matters for comment in this connection are: possible need of new capital or the desirability of capitalization or borrowing in a different form; the use of acceptances; advisability of paying dividends; sales and production policies; office and factory organization; physical control over merchandise; inventory methods; credit and collection methods; and especially correct accounting methods and the utilization of the information furnished by the accounts.

It may be said that auditors as a class have not availed

themselves of their opportunities in this direction as much as they might, owing largely to the fact that those who are qualified to do so have not taken it upon themselves to volunteer such assistance to their clients, perhaps in the belief that the clients would not welcome an offer of assistance that was not specifically requested. Whatever the cause, it behooves the professional auditors to get in closer touch with their clients, to the end that the ability of the auditors to offer constructive criticism and advice, not to mention their analytical ability in interpreting financial statements, shall be recognized, utilized, and compensated for.

Auditors have too often taken the position that it was their province to report facts only and let the readers of their reports draw their own conclusions. While it may not always be appropriate for the auditor to volunteer his opinion on a subject, he can at least assist the reader of the report by presenting the salient facts in condensed form. This does not mean that statement matter should merely be repeated in the text, but that it may be summarized and its significance pointed out.

The auditor should be careful not to permit himself to be drawn into a prognostication, as he should jealously guard his reputation, and that of his profession, for conservatism of statement and general reliability.

In conclusion, may the author express the hope that he has not entirely failed in his aim to present the principles and practice of auditing, including what few remarks have been made on the subject of reports, in such a way as to impress upon the reader that there are two companion thoughts which should constantly be uppermost in the mind of an auditor—practicality and appropriateness, both of which are essential to the performance of real service to the client.

PART II

CASES AND QUESTIONS

FOREWORD

The purpose of the audit cases and questions which have been prepared is to supply students or readers with material which will give them an opportunity to apply in a practical way what is taught in the text, exactly as they would be obliged to do on actual auditing engagements.

The three principal ways of learning are by seeing, by hearing, and by doing. We cannot do unless we have previously seen or heard. What we learn through reading or through oral instruction, on the other hand, is more clearly understood and longer retained if we experience immediately the practical application of the precepts.

Students of such professions as medicine and dentistry have been able for many years to supplement the knowledge which they gained from text-books and classroom work with actual experience obtained in hospitals and clinics before starting public practice. In order that students of the profession of auditing may likewise enjoy the benefit of passing through a stage of experimental work before being thrown upon their own resources, the case method of instruction is herewith presented. The practical training gained in solving these cases will, it is believed, enable the beginner to approach his first audit with the self-confidence of one to whom auditing methods are matters of everyday knowledge. The importance of self-confidence to an auditor cannot be exaggerated.

The advantage of being assigned to hypothetical audits in advance of actual engagements lies in the fact that mistakes made in the former, while they may serve just as effectively as "practical experience," are not so costly to the auditor's reputation as mistakes made in the latter.

Even auditors with some experience will, it is hoped, find concealed in the cases or the questions, some new points which they had not thought of before, and will be interested and stimulated in working out the solutions.

It will be noticed that the text in Part I follows a well-

defined course from the verification of the original records, through the verification of representative ledger accounts (in the order in which they usually appear on balance sheets, and statements of income and profit and loss) up to the rendition of the report, which ordinarily concludes an audit engagement. Part II will therefore follow the same order, the questions and cases being based upon principles already laid down.

There are certain chapters of the text, notably those treating of the possibilities of irregularities, to which the case method of supplementary instruction can readily be applied, and the opportunity is taken to present a series of cases exemplifying the manner in which fraud may be perpetrated, the manner in which the accounts may be manipulated in an attempt at concealment, and the manner in which the fraud may be uncovered. Other cases are introduced which do not involve fraud but which test the student's knowledge of audit procedure under various conditions. Transcripts of certain ledger accounts, of pages of books of original entry, and of auxiliary records, similar to those which may be found in actual audits, are given.

It may be added that there is no part of auditing so full of human interest as that involving the detection of defalcations. It is believed that anyone who completes a study of the cases presented herewith will, when he goes out to make an audit, be aware of the principal methods employed to secure cash or its equivalent wrongfully, and the principal methods used to conceal shortages. It is realized that a book of this kind cannot include the volume of transactions which an auditor would find in ordinary office records. For that reason evidence of manipulation is harder to conceal in the illustrations given than in actual books of account where the detail is much greater. But it must not be taken for granted on that account that the methods of falsifying book records which are exemplified in the cases will not be resorted to in actual life. On the contrary, they may be practiced with considerable success, especially where the mass of detail is great, unless the books are very carefully audited. It can also be said that the class of defalcations exemplified in these cases

can be uncovered by the auditor if he follows certain well-defined methods, explained in the text.

Certain parts of the chapters do not, by their very nature, permit of the case method of treatment. In connection therewith, the questions are included in order to assist the student to pick out and to remember the main points of auditing procedure.

Each case is devoted to some particular phase of auditing. The unit-case system, supplemented by questions, makes it possible to adapt the work to the requirements of any sized school or university.

In conclusion, and to encourage a review, questions from recent New York State C. P. A. examinations are given.

Attention is particularly called to Case 19, consisting of auditor's working papers and calling for a complete audit report. Question 173 deals with a summary of audit procedure.

A schedule of suggested lesson assignments may be found following the last question.

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OUTLINE—CASES AND QUESTIONS

Covering Accounting Records and Balance Sheet and Profit and Loss Accounts

ACCOUNTING RECORDS

	Questions	Cases
Books of original entry	21, 22, 23, 24, 143	
Cash Receipts		1, 2, 3, 4, 5, 7, 8
Cash Disbursements	29	3, 4, 5, 6, 7, 8
General Journal	30	2
Note Register		11
Petty Cash Book		7
Sales Journal		1, 2
Voucher Register	26–27	2, 6
Ledgers:		
General	16, 17, 21, 24, 25	
Subsidiary	24, 40	1, 2, 5
Auxiliary Records:		
Bank Reconcilements	33	3, 5, 7, 8
Trial Balances	16, 17, 31, 40	
By-Laws and Minutes	18, 140 (¶ 28)	
Certificates of Incorporation	19	
Partnership Agreements	20	

BALANCE SHEET ACCOUNTS

Assets

	Questions	Cases
Current Assets:		
Cash:		
On Hand	32, 34, 140 (¶ 1/2), 145	7, 8, 9, 10, 19
On Deposit—General	32, 33, 140 (¶ 3/4), 145, 157	5, 7, 9, 10, 19
On Deposit to Pay Dividends		10
On Deposit to Pay Interest		10
Certificates of Deposit		10
Notes and Acceptances Receivable	35, 140 (¶ 5), 158	11, 19
Accounts Receivable	36, 37, 38	19
Customers	9, 40, 140 (¶ 6/8)	1, 2, 5, 12, 13

PROFIT AND LOSS ACCOUNTS

NOTE: Question 173 calls for a summary of audit procedure in connection with all accounting records and ledger accounts.

CASES

Case No. 1

The firm of *A* and *B* began business February 1, 1924. The terms offered to customers were 10% discount for cash or 2% ten days. Cash sales were credited to Sales account net. As the cash sales were considerable on account of the liberal discount, it was thought best that *B* should receive the money from this source himself and turn it over at the end of the day to the cashier, who was also the bookkeeper. *B* gave a receipt in connection with each cash sale and retained a carbon copy thereof. These receipts were in pads and numbered (both original and duplicate) in sequence with printed numbers. At the end of two months it was decided that partner *A* should go over the accounts in order to find out whether or not the cashier had properly accounted for all the cash receipts for March.

Below will be found a copy of the cash book showing the receipts for March, a copy of the sales journal showing the credit sales for March, and transcripts of certain ledger accounts which were examined by *A*.

CASH RECEIPTS, MARCH, 1924

CHARGE				CREDIT		
Discount Allowed	*Net Amount Received*	*Day*	*Received From*	*Customers' Accounts*	*Cash Sales*	*Miscellaneous*
	$15,025.40	1	Balance			$15,025.40
$ 2.90	142.10	1	Henry Smith ...	$ 145.00		
30.00	1,470.00		Thomas Wilson.	1,500.00		
	305.60		Cash Sales		$ 305.60	
	216.43	3	Frank Billings..	216.43		
12.00	588.00		Frank Harrison.	600.00		
	900.00		Cash Sales		900.00	
	505.00	4	Roy Merkle	505.00		
	265.16		James Hornbeck.	265.16		
33.86	1,659.14		Edward Endicott	1,693.00		
	300.00		Cash Sales		300.00	
17.20	843.02	5	Frank Harrison.	860.22		
20.40	489.60		James Hornbeck.	510.00		
	243.90	6	Cash Sales		243.90	
24.00	576.00	7	Edward Endicott	600.00		
27.68	895.07	8	Frank Billings..	922.75		
	623.10	10	Joseph Wheeler.	623.10		
28.39	917.83		Samuel Crane...	946.22		
8.00	392.00	11	Roy Merkle.....	400.00		
	497.23	12	Cash Sales		497.23	
	801.60	13	Frank Billings..	801.60		
14.46	708.64	14	William Appleby	723.10		
12.81	627.44	15	E. L. Stever....	640.25		
18.13	888.27	21	James Hornbeck.	906.40		
	305.00		Edward Endicott	305.00		
	460.00		Cash Sales		460.00	
11.95	386.36	22	William Appleby	398.31		
	60.00		Henry Smith ...	60.00		
7.00	168.00	24	William Appleby	175.00		
22.86	739.04		Frank Harrison	761.90		
32.00	1,568.00	25	Roy Schaeffer...	1,600.00		
	943.10	26	Edward Endicott	943.10		
	372.60		Cash Sales		372.60	
16.00	784.00	29	Edward Endicott	800.00		
	450.00	31	Roy Merkle.....	450.00		
$339.64	$36,116.63			$18,351.54	$3,079.33	$15,025.40

SALES JOURNAL, MARCH, 1924

Date	*Inv. No.*	*Sold To*	*Amount*
1	38	R. Merkle	$ 500.00
	39	E. Endicott	600.00
	40	Samuel Crane	946.22
2	41	F. Billings	901.60
	42	J. Hornbeck	906.40
4	43	Roy Schaeffer	1,600.00
	44	Henry Smith	150.60
5	45	W. Appleby	175.00
	46	E. L. Stever	640.25
7	47	E. Endicott	305.90
8	48	W. Appleby	210.00
	49	R. Merkle	450.00
10	50	E. L. Stever	360.10
	51	E. Endicott	943.10
11	52	R. Merkle	693.14
12	53	E. L. Stever	140.20
	54	Henry Smith	210.40
	55	E. Endicott	800.00
14	56	F. Harrison	761.90
15	57	Henry Smith	83.40
	58	R. Merkle	1,946.10
18	59	Roy Schaeffer	243.70
	60	F. Harrison	469.32
	61	R. Merkle	243.63
21	62	Henry Smith	90.73
22	63	F. Harrison	519.45
23	64	R. Merkle	275.00
26	65	R. Merkle	310.40
27	66	F. Harrison	224.00
	67	R. Merkle	115.91
28	68	J. Wheeler	643.00
	69	F. Harrison	650.90
	70	R. Merkle	243.63
29	71	Henry Smith	560.20
	72	F. Harrison	1,247.95
	73	R. Merkle	561.10
31	74	E. Endicott	1,525.32
	75	F. Harrison	750.20
	76	R. Merkle	1,410.26
	77	Henry Smith	810.90
		Total	$24,219.01

WILLIAM APPLEBY

1924					*1924*			
Feb.	5	Merchandise ...		$ 723.10	Mar.	14	Remittance ..	$ 723.10
	28	" ...		398.31		22	" ..	398.31
Mar.	5	" ...		175.00		24	" ..	175.00
	8	"	210.00	210.00				*1,296.41*
				1,506.41				

FRANK BILLINGS

1924					*1924*			
Feb.	1	Merchandise ...		$ 905.60	Feb.	8	Remittance ..	$ 905.60
	12	" ...		243.70		13	" ..	243.70
	14	" ...		501.00		25	Correction of	
	16	" ...		216.43			overcharge	10.00
	29	" ...		922.75		29	Remittance ..	501.00
Mar.	1	Refund of over-			Mar.	3	" ..	216.43
		payment		10.00		8	" ..	922.75
	2	Merchandise ...		901.60		13	" ..	901.60
				3,701.08				*3,701.08*

SAMUEL CRANE

1924					*1924*			
Feb.	5	Merchandise ...		$ 810.20	Feb.	29	Remittance ..	$ 100.00
	12	" ...		146.10	Mar.	10	" ..	946.22
Mar.	1	"	856.30	946.22				
				1,902.52				

E. ENDICOTT

1924					*1924*			
Feb.	6	Merchandise ...		$ 900.00	Feb.	13	Remittance ..	$ 200.00
	19	" ...		430.61		16	" ..	700.00
	20	" ...		27.30		23	" ..	430.61
	23	" ...		246.50		25	" ..	27.30
	25	" ...		1,693.00		29	" ..	246.50
Mar.	1	" ...		600.00	Mar.	4	" ..	1,693.00
	7	" ...		305.00		7	" ..	600.00
	10	" ...		943.10		21	" ..	305.00
	12	" ...		800.00		26	" ..	943.10
	31	"	1,525.32	1,525.32		29	" ..	800.00
				7,470.83				

J. HORNBECK

1924					*1924*			
Feb.	15	Merchandise ...		$ 275.16	Mar.	4	Remittance ..	$ 275.16
	28	" ...		510.00		5	" ..	510.00
Mar.	2	" ...		906.40		21	" ..	906.40
				1,691.56				*1,691.56*

FRANK HARRISON

1924				1924		
Feb. 6	Merchandise ...		$ 810.23	Feb. 16	Remittance	810.23
18	" ...		973.60	28	"	973.60
23	" ...		600.00	Mar. 3	"	600.00
26	" ...		860.22	5	"	860.22
Mar. 14	" ...		761.90	24	"	761.90
18	" ...		469.32			*4,005.95*
22	" ...		519.45			
27	" ...		224.00			
28	" ...		650.90			
29	" ...		1,247.95			
31	"	3,961.82	750.20			
			7,967.77			

R. M

1924				1924		
Feb. 1	Merchandise ...		$ 230.60	Feb. 11	Remittance	$ 230.60
15	" ...		505.00	Mar. 4	"	505.00
Mar. 1	" ...		500.00	11	"	500.00
8	" ...		450.00	31	"	450.00
11	" ...		693.14			*1,685.60*
15	" ...		1,946.10			
18	" ...		243.63			
23	" ...		275.00			
26	" ...		310.40			
27	" ...		115.91			
28	" ...		243.63			
29	" ...		561.10			
31	"	5,899.17	1,410.26			
			7,484.77			

E. L.

1924				1924		
Feb. 8	Merchandise ...		$ 310.60	Feb. 22	Remittance	$ 652.12
16	" ...		200.90	Mar. 15	"	640.25
19	" ...		140.62			
23	" ...		153.70			
25	" ...		274.82			
29	" ...		500.00			
Mar. 5	" ...		640.25			
10	" ...		360.10			
12	"	1,428.82	140.20			
			2,721.19			

ROY SC

1924				1924		
Mar. 4	Merchandise ...		$1,600.00	Mar. 25	Remittance	$1,600.00
18	"	243.70	243.70			

HENRY SMITH

1924				*1924*			
Feb.	26	Merchandise ...	$ 145.00	Mar.	1	Remittance	$ 145.00
	27	" ...	60.00		22	"	60.00
	28	" ...	143.70				*205.00*
	29	" ...	260.10				
Mar.	4	" ...	150.60				
	12	" ...	210.40				
	15	" ...	83.40				
	21	" ...	90.73				
	29	" ...	560.20				
	31	" 2,310.03	810.90				
			2,515.03				

J. WHEELER

1924				*1924*			
Feb.	8	Merchandise ...	$ 213.05	Mar.	10	Remittance	$ 623.10
	12	" ...	100.05				
	19	" ...	310.00				
	29	" ...	400.00				
Mar.	28	" 1,043	643.00				
			1,666.10				

THOMAS WILSON

1924				*1924*			
Feb.	20	Merchandise ...	$1,500.00	Mar.	1	Remittance	$1,500.00

CUSTOMERS' CONTROLLING ACCOUNT

1924				*1924*			
Feb.	29	Sales	$17,641.95	Feb.	25	Correction of overcharges ..$	10.00
Mar.	1	Refund of over-payment	10.00		29	Remittances ...	6,021.26
	31	Sales ..17,488.16	24,219.01	Mar.	31	" ...	18,351.54
			41,870.96				*24,382.80*

CASH SALES

1924				*1924*			
Feb.	29	Sales	$4,262.50	Feb.	29	Cash	$4,262.50
Mar.	31	"	3,079.33	Mar.	31	"	3,079.33

A proved the footings of the cash book and checked the following adding machine list of the balances of customers' accounts as at March 31 prepared by the bookkeeper, and

found it in agreement with the balance of the controlling account:

210.00
856.30
1,525.32
3,961.82
5,899.17
1,428.82
243.70
2,310.03
1,043.00
17,488.16 *

Furthermore he checked the amounts of cash sales per the carbon copies of receipts given by *B* against the amounts shown in the cash book and found them in agreement therewith. He took a trial balance of the general ledger and found the books in balance. He counted the cash on hand at the close of business of March 31 and reconciled the balance of cash per the books with the amount confirmed by the bank as being on deposit at the same time. There were no outstanding checks in the reconcilement. Only the partners had authority to sign checks. All checks were examined and found to be properly signed. Furthermore the disbursements were all supported by properly approved vouchers.

On the strength of the results of the procedure mentioned above, *A* assured *B* that there was no evidence of misappropriation of cash. Do you agree with the findings? If not, explain what evidence there is of a defalcation and the probable amount thereof, and show how you arrived at your conclusions.

Case No. 2

Below are given transcripts of the cash receipts, sales journal, voucher register, and general journal of Company *A* (a trading company which closes its books every six months) for the month of December, 1923, and transcripts of certain selected ledger accounts. Copies of the inventories at July 1, 1923, and at December 31, 1923, are also given.

To simplify matters, it is assumed that only three classes of merchandise are handled, and that these are specified as *A*, *B*, and *C*.

All entries in the general journal and in the voucher register

were supported by vouchers approved by executives authorized to approve. Merchandise was purchased under purchase order numbers and sold under sales order numbers. During the six months ended December 31 there were no changes in purchase or selling prices, which were as follows:

Class	*Purchase Price*	*Selling Price*
A	$ 6.06	$10.10
B	8.37	15.22
C	11.63	20.05

It will be assumed that the entries in the Customers' controlling account were correct, and that the footings of the debits and credits and the abstraction of the balance thereof at December 31 were also correct. It may be further assumed that the footings and abstraction of balances of the individual customers' accounts were correct, and that the subsidiary ledger was in agreement with the control.

Confining yourself to the data and explanations given, what adjustments of accounts (if any) would an auditor probably make as of December 31? Are there any indications of fraud? If so, explain them fully and state what an auditor's probable procedure would be to convince himself that he would be justified in asserting that fraud had actually been committed.

CASH RECEIPTS, DECEMBER, 1923

CHARGE				CREDIT			
Discount Allowed	*Net Amount Received*	*Day*	*Received From*	*Customers' Accounts*	*Cash Sales*	*Miscellaneous Accounts*	*Amount*
$ 6.92	$ 339.18		Frank Leslie	$ 346.10			
	105.70		Cash Sales		$105.70		
	18.00		Interest on Maxfield Bond			Acc. Int. Rec.	$18.00
	91.60	7	Cash Sales		91.60		
4.12	202.00	8	George Fairfax ...	206.12			
	403.70	9	James Middleton ..	403.70			
	142.00	18	Cash Sales		142.00		
	151.60	23	Midler Stevens	151.60			
	234.70	26	Max Winfield	234.70			
	135.00	27	James Middleton ..	135.00			
	270.00	28	J. L. Scott.........	270.00			
6.70	328.14	31	T. D. Wheeler....	334.84			
$17.74	$2,421.62			$2,082.06	$339.30		$18.00

SALES JOURNAL, DECEMBER, 1923

			DEBIT	CREDIT		
Date	*Inv. No.*	*To*	*Customers' Accounts*	*A Sales*	*B Sales*	*C Sales*
Dec. 1	1203	A. W. Bruns..........	$ 505.00	$ 505.00		
	1204	T. D. Wheeler.......	1,500.00		$1,500.00	
	1205	F. A. Machon	300.75			$ 300.75
4	1206	A. W. Bruns........	434.30	434.30		
	1207	Geo. Fairfax	171.70	171.70		
	1208	Wm. Hansen	380.50		380.50	
6	1209	Alex. Wilson	106.54		106.54	
	1210	R. O. Green.........	202.00	202.00		
	1211	Mortimer Salisbury ..	360.90			360.90
8	1212	A. W. Bruns........	929.20	929.20		
	1213	Alex. Wilson	502.26		502.26	
	1214	Wm. Hansen	621.55			621.55
15	1215	L. I. Tuttle..........	737.30	737.30		
	1216	F. A. Machon.......	700.12		700.12	
24	1217	A. W. Bruns.........	421.05			421.05
	1218	Wm. Hansen	191.90	191.90		
	1219	T. D. Wheeler.......	547.92		547.92	
27	1220	Mortimer Salisbury...	280.70			280.70
	1221	A. W. Bruns........	360.90			360.90
	1222	R. O. Green.........	272.70	272.70		
	1223	F. A. Machon........	151.50	151.50		
29	1224	L. I. Tuttle.........	300.75			300.75
	1225	Geo. Fairfax	121.76		121.76	
	1226	T. D. Wheeler.......	608.80		608.80	
	1227	Alex. Wilson	140.35			140.35
31	1228	R. O. Green.........	232.30	232.30		
			$9,582.75	$3,827.90	$2,967.90	$2,786.95

VOUCHER REGISTER, DECEMBER, 1923

			DEBIT			
Voucher No.	*Purchas From*	*Credit Vouchers Payable*	*A Purchases*	*B Purchases*	*C Purchases*	*Expense Controlling Account*
2263	James Montgomery ..	$ 254.52	$ 254.52			
4	Francis Affron	133.92		$133.92		
5	Johnson & Co........	545.40	545.40			
6	Ericson & Brown.....	266.64	266.64			
7	Samuel Booth	581.50			581.50	
8	James Montgomery ..	181.80	181.80			
9	Frank Harrington ...	210.60				$210.60
70	B. B. Sales Co........	45.70				45.70
1	Ericson & wn.....	127.26	127.26			
2	Thos. Tarkington	80.25				80.25
3	Samuel Booth	93.04			93.04	
4	Johnson & Co........	162.82			162.82	
5	Utility Electric Light Co.	25.70				25.70
6	Jones Realty Co.—Rent	250.00				250.00
7	City Treasurer—Taxes	248.60				248.60
8	Johnson & Co........	78.78	78.78			
9	Samuel Booth	58.59		58.59		
80	James Montgomery ..	72.72	72.72			
1	Ericson & Brown.....	84.84	84.84			
2	Frank Harrington	40.10				40.10
3	Francis Affron	142.29		142.29		
4	Blackburn Co.	220.97			220.97	
5	H. Van Duyn & Co...	248.46	248.46			
6	Ericson & Brown.....	303.00	303.00			
7	Ajax Co.	502.20		502.20		
		$4,959.70	$2,163.42	$837.00	$1,058.33	$900.95

GENERAL JOURNAL, DECEMBER, 1923

December 4

Returns and Allowances		$ 15.32	
Customers' Accounts—James Filmore			$ 15.32
For error in invoice #234 dated			

December 12

Sales		$202.00	
Customers' Accounts—R. O. Green			$202.00
For cancellation of invioce #1210			

December 13

Returns and Allowances		$417.44	
Customers' Accounts			$417.44
Samuel Buck, Invoice #1148	$80.31		
George Smith, " #1127	29.40		
Frank Harding, " #1183	105.60		
Jesse Canfield, " #1199	40.20		
A. W. Bruns, " #1186	161.93		
For returns of defective material			

December 31

Reserve for Bad Debts		$1,782.59	
Customers' Accounts			$1,782.59
F. O. Hopper	$ 142.60		
W. A. Bradley	275.30		
R. G. Frank	212.32		
F. A. Machon	1,152.37		
To write off above accounts			
Insurance		$ 105.70	
Unexpired Insurance			$ 105.70
To adjust ———			
Interest Accrued Receivable		$ 45.00	
Interest Earned			$ 45.00
For one month's interest on ———			

INVENTORY, JULY 1, 1923

Class *A*	Items 462 @ $ 6.06	$ 2,799.72
" *B*	" 721 @ 8.37	6,034.77
" *C*	" 410 @ 11.63	4,768.30
	Total	$13,602.79

INVENTORY, DECEMBER 31, 1923

Class *A*	Items 899 @ $ 6.06	$ 6,053.94
" *B*	" 823 @ 8.37	6,888.51
" *C*	" 625 @ 11.63	7,268.75
	Total	$20,211.20

A PURCHASES

1923			
Jul.	31	Voucher Register	$ 2,489.26
Aug.	31	" "	3,920.82
Sep.	30	" "	4,623.78
Oct.	31	" "	2,636.10
Nov.	30	" "	2,508.84
Dec.	31	" "	2,163.42
		Total	$18,342.22

B PURCHASES

Jul.	31	Voucher Register	$ 8,453.70
Aug.	31	" "	1,523.34
Sep.	30	" "	2,318.49
Oct.	31	" "	1,891.62
Nov.	30	" "	4,353.20
Dec.	31	" "	837.00
		Total	$19,377.35

C PURCHASES

Jul.	31	Voucher Register	$ 1,267.67
Aug.	31	" "	1,535.16
Sep.	30	" "	1,721.24
Oct.	31	" "	1,000.18
Nov.	30	" "	2,624.74
Dec.	31	" "	1,058.33
		Total	$9,207.32

A SALES

1923			
Jul.	31	Sales Journal	$ 5,656.00
Aug.	31	" "	4,989.40
Sep.	30	" "	1,343.30
Oct.	31	" "	5,100.50
Nov.	30	" "	4,229.56
Dec.	31	" "	3,827.90
		Total	$25,146.66

B SALES

Jul.	31	Sales Journal	$ 7,457.80
Aug.	31	" "	5,194.23
Sep.	30	" "	4,505.12
Oct.	31	" "	6,133.66
Nov.	30	" "	5,920.58
Dec.	31	" "	2,967.90
		Total	$32,179.29

C SALES

Jul.	31	Sales Journal	$ 1,964.90
Aug.	31	" "	1,383.45
Sep.	30	" "	1,478.64
Oct.	31	" "	3,889.70
Nov.	30	" "	2,566.40
Dec.	31	" "	2,786.95
		Total	$14,070.04

R. G. FRANK

1923					1923			
Jan.	5	Invoice	#130	$ 40.62	Dec.	31	Reserve for Bad Debts	$ 212.32
Feb.	8	"	#210	171.70				

F. A. MACHON

1923					1923			
Dec.	1	Invoice	#1205	$300.75	Dec.	31	Reserve for Bad Debts	$1,152.37
	15	"	#1216	700.12				
	27	"	#1223	151.50				

R. O. GREEN

1923					1923			
Dec.	6	Invoice	#1210.	$202.00	Dec.	12	Invoice Cancelled	$ 202.00
	27	"	#1222.	272.70				
	31	"	#1228.	232.30				

GEORGE FAIRFAX

1923					1923			
Apr.	3	Invoice	#405.	$ 42.10	May	5	Cash	42.10
May			#560	150.60	May	18		150.60
Jul.	7		#712	200.30	Aug.	8		200.30
Sep.	8		#923	105.70	Sep.	18		105.70
Nov.	30		#1146	206.12	Dec.	8		206.12
Dec.	4		#1207	171.70	Dec.	14		171.70
	29		#1225	121.76				

T. D. WHEELER

1923					1923			
Apr.	14	Invoice	#435.	$476.92	Apr.		Cash	$ 476.92
Jun.	12		#642.	521.70	Jun.		"	521.70
Jul.	16		#746.	346.90	Jul.		"	346.90
Aug.	25		#830.	275.96	Sep.		"	275.96
	31		#845.	143.20	Sep.		"	143.20
Nov.	10		#1188.	223.60	Nov.		"	223.60
Dec.	24		#1219.	547.92	Dec.		"	334.84
	29		#1226.	608.80				

A. W. BRUNS

1922					*1922*			
Jul.	12	Invoice #714.	$432.60		Dec.	15	Cash	$1,045.40
Oct.	15	#1040.	369.20					
Dec.	14	#1243.	243.60		*1923*			
					Nov.	22		100.00
1923					Dec.	26		161.93
Apr.	12	" #408.	261.93					
Nov.	15	" #1154.	432.10					
Dec.	1	" #1203.	505.00					
	4	" #1206.	434.30					
	8	" #1212.	929.20					
	24	" #1217.	421.05					
	27	" #1221.	360.90					

Case No. 3

A junior auditor, assigned to the task of verifying the cash records for a year, reasoned that if he reconciled the bank balance at the beginning of the year, checked all the paid checks returned by the bank during the year against the check record and reconciled the bank balance at the end of the year (as a part of the audit work), he would not be further obliged to foot the cash book. He said to himself that, if the balance at the beginning of the year agreed with (or could be reconciled with) the bank balance at the same date and if he checked the returned checks against the check record and included all those recorded in the check record which were not returned by the bank in a reconcilement of the bank balance at the end of the year, then the cash book footings and resulting balance at the end of the year *must* be right. Being slightly in doubt about it, however, he quickly took an adding machine list of the monthly totals of the cash receipts and subtracted from the total of this list, the total of an adding machine list of the balances brought forward at the beginning of each month included in the monthly totals. He found this remainder in agreement with an adding machine list of the monthly deposits per the bank statements for the year.

He then took an adding machine list of the withdrawals per the bank statements, to the total of which he added the total of outstanding checks per the reconcilement at the end of the year. From this sum he deducted the total outstanding checks at the beginning of the year. The remainder he found in agreement with the total of an adding machine

list of the monthly totals of the check record. Preparing the adding machine lists took only a short time and he felt more than repaid because then he was positive that it would not be necessary for him to do any more work on the cash book. Was he right or wrong?

Submit proofs, using the following data, and state what evidence there is (if any) of fraud.

RECONCILEMENT OF BANK BALANCE, BEGINNING OF YEAR

Balance, per bank statement		$4,955.00
Add undeposited receipts of December 31		261.30
		$5,216.30
Less:		
Interest allowed by bank at December 31, not taken up on cash book until January 3	$ 4.25	
Outstanding checks	275.76	280.01
Balance per cash book		$4,936.29

RECONCILEMENT OF BANK BALANCE, END OF YEAR

Balance per bank statement		$6,037.29
Less:		
Interest allowed by bank at December 31, not taken up on cash book at December 31	$ 5.22	
Outstanding checks	345.92	351.14
Balance per cash book		$5,686.15

The bank statements for the year showed the following:

	Deposits	*Withdrawals*	
Balance, January 1			$4,955.00
Transactions during the year:			
Jan.	$ 3,343.04	$ 2,460.10	
Feb.	2,466.22	1,510.70	
Mar.	5,920.70	3,260.40	
Apr.	2,726.25	5,420.10	
May	3,600.20	3,860.00	
Jun.	5,722.60	8,310.75	
Jul.	2,760.40	1,210.90	
Aug.	6,344.25	8,430.70	
Sep.	975.10	277.20	
Oct.	1,909.75	3,800.91	
Nov.	5,722.60	3,900.70	
Dec.	9,218.14	7,184.50	
	$50,709.25	$49,626.96	$1,082.29
Balance, December 31			$6,037.29

The record of cash received for the year showed the following:

	Charge			Credit		
	Discount Allowed	Net Amount Received	Received From	Customers' Accounts	Cash Sales	Miscellaneous Accounts
Jan.		$ 4,936.29	Balance			$4,936.29
	$146.20	2,850.14	Sundry Customers..	$2,996.34		
		231.60	Cash Sales		$231.60	
		4.25	Bank Interest			4.25
	$146.20	$ 8,022.28	Total	$2,996.34	$231.60	$4,940.54
Feb.		$ 5,437.94	Balance			$5,437.94
	$205.30	2,315.62	Sundry Customers..	$2,520.92		
		150.60	Cash Sales		$150.60	
	$205.30	$ 7,904.16	Total	$2,520.92	$150.60	$5,437.94
Mar.		$ 6,193.46	Balance			$6,193.46
	$ 56.40	5,920.70	Sundry Customers..	$5,977.10		
		300.00	Cash Sales		$300.00	
	$ 56.40	$12,414.16	Total	$5,977.10	$300.00	$6,193.46
Apr.		$ 8,753.76	Balance			$8,753.76
	$ 32.70	2,726.25	Sundry Customers..	$2,758.95		
		210.70	Cash Sales		$210.70	
	$ 32.70	$11,690.71	Total	$2,758.95	$210.70	$8,753.76
May		$ 6,470.61	Balance			$6,470.61
	$ 14.75	3,460.75	Sundry Customers..	$3,475.50		
		239.45	Cash Sales		$239.45	
	$ 14.75	$10,070.81	Total	$3,475.50	$139.45	$6,470.61
Jun.		$ 6,805.81	Balance			$6,805.81
	$ 80.22	5,423.90	Sundry Customers..	$5,504.12		
		298.70	Cash Sales		$298.70	
	$ 80.22	$12,528.41	Total	$5,504.12	$298.70	$6,805.81
Jul.		$ 3,822.54	Balance			$3,822.54
	$ 41.34	2,637.70	Sundry Customers..	$2,679.04		
		122.70	Cash Sales		$122.70	
	$ 41.34	$ 6,582.94	Total	$2,679.04	$122.70	$3,822.54

	Charge			Credit		
	Discount Allowed	*Net Amount Received*	*Received From*	*Customers' Accounts*	*Cash Sales*	*Miscellaneous Accounts*
Aug.		$ 5,572.01	Balance			$5,572.01
		6,143.73	Sundry Customers..	$6,143.73		
		275.20	Cash Sales		$275.20	
		200.00	Interest on Bonds..			200.00
		35.72	Sale of Scrap......			35.72
		$12,226.66	Total	$6,143.73	$275.20	$5,807.73
Sep.		$ 3,494.21	Balance			$3,494.21
	$ 5.43	614.70	Sundry Customers..	$ 620.13		
		50.00	Cash Sales		$ 50.00	
	5.43	$ 4,158.91	Total	$ 620.13	$ 50.00	$3,494.21
Oct.		$ 3,419.40	Balance			$3,419.40
	$ 18.70	1,769.15	Sundry Customers..	$1,787.85		
		140.60	Cash Sales		$140.60	
		200.00	Checks Exchanged.			200.00
	$ 18.70	$ 5,529.15	Total	$1,787.85	$140.60	$3,619.40
Nov.		$ 2,892.45	Balance			$2,892.45
	$ 80.20	5,616.90	Sundry Customers..	$5,697.10		
		105.70	Cash Sales		$105.70	
	$ 80.20	$ 8,615.05	Total	$5,697.10	$105.70	$2,892.45
Dec.		$ 4,714.35	Balance			$4,714.35
		8,350.62	Sundry Customers..	$8,350.62		
		151.60	Cash Sales		$151.60	
		$13,216.57	Total	$8,350.62	$151.60	$4,714.35

The check record for the year showed the following:

	Credit: Discount Earned	Credit: Amount of Check	Paid To	Charge: Vouchers Payable	Charge: Miscellaneous
Jan.	$25.60	$2,584.34	Sundry Creditors	$2,609.94	
Feb.	$30.75	$1,210.70	Sundry Creditors	$1,241.45	
		500.00	Bank Loan		$500.00
	$30.75	$1,710.70	Total	$1,241.45	$500.00
Mar.		3,660.40	Sundry Creditors	$3,660.40	
Apr.		$5,220.10	Sundry Creditors	$5,220.10	
May	$14.80	$2,865.00	Sundry Creditors	$2,879.80	
		400.00	Notes Payable		$400.00
	$14.80	$3,265.00	Total	$2,879.80	$400.00
Jun.		$8,705.87	Sundry Creditors	$8,705.87	
Jul.	$ 4.75	$1,010.93	Sundry Creditors	$1,015.68	
Aug.	$16.45	$8,732.45	Sundry Creditors	$8,748.90	
Sep.		$ 739.51	Sundry Creditors	$ 739.51	
Oct.	$14.20	$2,436.70	Sundry Creditors	$2,450.90	
		200.00	Checks Exchanged		$200.00
	$14.20	$2,636.70	Total	$2,450.90	$200.00
Nov.		$3,900.70	Sundry Creditors	$3,900.70	
Dec.		$7,530.42	Sundry Creditors	$7,530.42	

The junior auditor's "proof" was as follows:

Total of adding machine list of monthly totals of cash receipts..	$112,959.81
Less total of adding machine list of "balances brought forward" included in above	62,512.83
Difference—cash receipts per cash book	$ 50,446.98
Less interest recorded in January allowed by bank in previous December (see reconcilement at beginning of year)	4.25
	$ 50,442.73
Add:	
Interest allowed by bank at end of year	5.22
Deposit in January of cash receipts of previous year undeposited at December 31 (see reconcilement at beginning of year)	261.30
Total of adding machine list of total deposits per bank statements	$ 50,709.25
Total of adding machine list of monthly totals of cash disbursements	$ 49,697.12
Add outstanding checks, January 1 (see reconcilement beginning of year)	275.76
	$ 49,972.88
Less outstanding checks December 31 (see reconcilement end of year)	345.92
Total of adding machine list of monthly withdrawals per bank statements	$ 49,626.96

Case No. 4

Assume the following conditions for any business:

1. The only receipts were customers' remittances and these were all in the form of checks made out in the name of the company.
2. A treasurer who received the receipts also made the deposits and kept the cash books (Record of Cash Received, and Check Record).
3. The treasurer was authorized to sign checks, but all checks had to be countersigned by the vice-president.
4. As each check was drawn, the voucher in support thereof was stamped "Paid." This voucher accompanied the check when it was sent to the vice-president for counter-signature so that he could be assured of the propriety of the payment.
5. The company maintained a fund of $1,000 to accommodate officers and others who often wished to cash their personal checks therefrom. An account called "Fund for Cashing Checks" was charged with the original $1,000 and

with all checks drawn to replenish the fund, and was credited with the checks received in exchange for currency.

Given the foregoing working conditions, explain how the treasurer might misappropriate cash and conceal his defalcation without collusion of any kind. At the same time explain how an auditor might uncover the methods used by the treasurer first to obtain the cash, and second to conceal his shortages.

Case No. 5

Below are shown the cash receipts and disbursements for the last five days of December of the *A. B. C.* Company, copies of deposit slips as obtained from the banks (without a repetition of the headings thereof) for those same days; and transcripts of the ledger accounts of those customers whose remittances are shown.

The Company had only two depositaries, the Guaranty Trust Company and the Hanover National Bank, both of New York. Reconcilements of their balances with the cash book balance at December 31 are also shown.

If from the data, as given, you find any evidence of a shortage, explain the nature of the irregularities and state the amount of the shortage; also point out in detail the ways in which the records have been falsified to conceal the defalcation.

It will be assumed in this case that the cashier had no means of obtaining money except from the cash which was recorded in the cash book; in other words, he was not in a position to abstract cash receipts which were not recorded nor was he able to borrow, even temporarily, the money to make good a shortage until after the auditor had proved the cash—if a shortage in reality existed.

CASH RECEIPTS, DECEMBER

	Charge			Credit		
Date	Discount Allowed	Net Amount Received	Received From	Customers' Accounts	Cash Sales	Miscellaneous Accounts
1		$ 944.60	Balance			$ 944.60
1 to 26	$ 96.00	7,500.00	Detail omitted	$6,796.00	$ 800.00	
27	6.21	304.49	Frank Woody	310.70		
		47.22	James Spencer	47.22		
		150.00	Cash Sales		150.00	
28	9.23	452.08	W. A. Green	461.31		
		29.42	Cash Sales		29.42	
29		150.73	Gerald Hopkins	150.73		
		49.70	Thos. Friend	49.70		
		200.00	Bond Interest			200.00
30		79.62	Frank Woody	79.62		
		205.00	Cash Sales		205.00	
		523.19	Gerald Hopkins	523.19		
31		122.70	Alexander McKinley	122.70		
		48.65	Frank Roberts	48.65		
		134.89	Thos. Friend	134.89		
		63.85	Cash Sales		63.85	
	$111.44	$11,006.14	Total	$8,724.71	$1,248.27	$1,144.60

CASH DISBURSEMENTS, DECEMBER

Date	Credit		Paid To	Charge		
	Discount Earned	Amount of Check		Check No.	Accounts Payable	Miscellaneous Accounts
1 to 26	$14.90	$1,351.90	Detail Omitted		$1,260.90	$ 105.90
27		50.72	J. R. Appleby..................	803	50.72	
		1,346.00	Farmers Trust Co.—Bank Loan..	804		1,346.00
28	2.90	142.10	R. A. Wilson..................	805	145.00	
29		346.90	J. O. Bloom..................	2539	346.90	
30		150.73	M. E. Chambers...............	806	150.73	
31		29.30	J. R. Appleby..................	2540	29.30	
	$17.80	$3,417.65	Total		$1,983.55	$1,451.90

NOTE: The 800 series of checks were drawn on the Guaranty Trust Company and the 2500 series on the Hanover National Bank.

Deposited in

GUARANTY TRUST COMPANY

By A. B. Company

New York, N. Y.....

Specify Town—If New York, name of bank

Dec. 27

Bills	$100.00
Currency	48.25
Checks:	
Guaranty Trust	122.70
Equitable Trust	48.65
Hanover National	134.89
Hanover National	47.22
Total	$501.71

Dec. 28

Bills	
Currency	$ 6.68
Checks:	
Mechanics and Metals	372.60
Fifth Ave.	60.05
Guaranty Trust	42.17
Total	$481.50

Dec. 29

Bills	$ 14.00
Currency	35.70
Coupons	200.00
Checks:	
Equitable Trust	150.73
Total	$400.43

Dec. 30

Bills	$100.00
Currency	5.00
Checks:	
Total	$105.00

Dec. 31

Bills	$ 60.00
Currency	
Checks:	
Hanover National Bank	153.12
Total	$213.12

DEPOSITED IN

HANOVER NATIONAL BANK

By A. B. COMPANY

New York, N. Y...............192.

Specify Town—If New York, name of bank

Dec. 30

Bills	$100.00
Currency	
Checks:	
Guaranty Trust	79.62
Mechanics and Metals..	523.19
Total	$702.81

Dec. 31

Bills	
Currency	$ 3.85
Checks:	
Guaranty Trust	153.12
Total	$156.97

RECONCILEMENT OF BANK BALANCES, DECEMBER 31

Guaranty Trust Company:		
Balance per bank statement....................	$7,609.09	
Less outstanding check No. 806................	150.73	$7,458.36
Hanover National Bank:		
Balance per bank statement....................	$ 159.43	
Less outstanding check No. 2540...............	29.30	130.13
Balance per cash book............................		$7,588.49

FRANK WOODY

May	15	Invoice.........	$407.22	May 22	Cash............	$407.22
Jun.	18	Invoice.........	173.15	Jun. 28	Cash............	173.15
Nov.	1	Invoice.........	310.70	Dec. 27	Cash............	310.70
Dec.	1	Invoice.........	79.62	Dec. 30	Cash............	79.62
Dec.	15	Invoice.........	143.60			

JAMES SPENCER

Aug.	22	Invoice.........	$ 30.46	Sep. 28	Cash............	$ 30.46
Nov.	30	Invoice.........	47.22	Dec. 27	Cash............	47.22

W. A. GREEN

Jun.	12	Invoice.........	$461.31	Dec. 28	Cash............	$461.31

GERALD HOPKINS

Nov.	30	Invoice.........	$150.73	Dec. 29	Cash............	$150.73
Dec.	3	Invoice.........	523.19	Dec. 30	Cash............	523.19
Dec.	8	Invoice.........	27.20			

THOMAS FRIEND

Nov.	5	Invoice.........	$134.89	Dec. 29	Cash............	$ 49.70
Dec.	19		49.70	Dec. 31	Cash............	134.89

ALEXANDER McKINLEY

Aug.	7	Invoice.........	$122.70	Dec. 31	Cash............	$122.70

FRANK ROBERTS

Sep.	8	Invoice.........	$ 48.65	Dec. 31	Cash............	$ 48.65
Oct.	12	Invoice.........	210.70			

Case No. 6

Given the following copies of vouchers recorded in the voucher register for the month of December, and the following transcripts of the check record and of the voucher register

for the month of December, report your audit findings. Questions of accruals and deferred charges may be ignored. An accounts payable ledger is kept. Check No. 2608 was drawn in favor of J. C. Blumer for $100.

The illustrated vouchers are not submitted as exact reproductions of every detail that may be found on creditors' invoices. Only one payroll entry for the month appears in the voucher register, whereas in actual business there would probably be four or five. Such matters may be overlooked and need not be commented upon in your findings.

Be sure to explain fully any evidence of fraud or error which you may find.

COMMERCIAL PHOTOGRAPH CO.

Sold To—Blank Co.

Nov. 29
Terms: 2%, 10 days

Cleaning Photo and Retouching of Three Photos............ $31.75

Vo. No. 1585

BRADBURY LUMBER CO.

Sold To—Blank Co.

Dec. 2
Terms: 30 days net

1000 ft. 1 x 12 Hemlock................................. $44.00

Vo. No. 1586

FAIRFAX LEATHER CO.

Sold To—Blank Co.

Dec. 2
Terms: Net

265 lbs. Sole Leather Chips Delivered	.00½ per Lb.	$1.33

Vo. No. 1587

L. A. SAMPSON CO.

Sold To—Blank Co.

Nov. 29
Terms: Net

12 lbs. Steel	.54	
3 hrs. Labor 1 fork forging	3.75	$4.29

Vo. No. 1588

BLACK & BROWN

Sold To—Blank Co.

Dec. 5
Terms: Net

Blue Prints	.36	
3 yds. Tracing Cloth 1.00	3.00	$3.36

Vo. No. 1589

JOHNSTOWN JOURNAL

Sold To—Blank Co.

Dec. 6
Terms: 2%, 10 days

200 Cards for Window Display.......................... $151.20

Vo. No. 1590

UNION ELECTRIC LIGHT CO.

Sold To—Blank Co.

Dec. 5
Terms: 30 days net

Light and Power for November.......................... $453.38

Factory	$433.25	
Office	20.13	
	$453.38	

Vo. No. 1591

COMMERCIAL PHOTOGRAPH CO.

Sold To—Blank Co.

Dec. 8
Terms: 2%, 10 days

36 Prints $12.96

Vo. No. 1592

COMMERCIAL PHOTOGRAPH CO.

Sold To—Blank Co.

Dec. 10
Terms: 2%, 10 days

7 Photos @ 2.50		17.50	
42 Prints	16.80		
10%	1.68	15.12	$32.62

Vo. No. 1593

JASPER SHEET METAL CO.

Sold To—Blank Co.

Nov. 28
Terms: 2%, 10 days

Hoods & Guards for Emery Wheels & Piping		
68 lbs. Gal. Iron	6.10	
2 lbs. Solder	1.00	
Time: Man 43½ hours	64.50	
	71.60	
Gas Ovens	200.00	$271.60
Less 2%	.	4.43
		$267.17

Vo. No. 1594

WESTERN UNION

To—BLANK Co.

Dec. 8

65 Telegrams for month of November....................	$150.06
(*Detail omitted*)	

Vo. No. 1595

JACKSON INSTRUMENT CO.

Sold To—BLANK Co.

Dec. 10
Terms: 30 days net

1 Model 120—P. Pyrometer grad. 0-2000° F. Val. for 24″ EF ⅛″ Thermocouple and 15 Ft. portable leads—total external resistance 0.26 ohms...........	$100.00

Vo. No. 1596

AETNA HARDWARE CO.

Sold To—A. R. DUNNING

Dec. 12
Terms: 10 days net

500# 5 coils #12 Black Wire @ 4.95.............	24.75	
1 doz. 1″ Hindu Brushes	1.15	$25.90

Vo. No. 1597

PACIFIC HARDWARE CO.

Sold To—BLANK Co.

Dec. 3
Terms: 10 days net
from Dec. 3

27 Vitalum Wheels 8 x 2 x ¾ Gran 16—Grade 0 @ 10.30.... $278.10

65—10%..... $87.61

Vo. No. 1598

BLACK POWDER CO.

Sold To—BLANK Co.

Dec. 3
Terms: 2%, 10 days

10 Round Bbls. 5,405 lbs. F Wood Rosin
19.303 Std. Bbls. of 280 lbs. Each @ 5.40 Each $104.24
F. O. B. Ex Warehouse

Vo. No. 1599

JAMES ELEVATOR CO.

Sold To—BLANK Co.

Dec. 15
Terms: 10 days net

4½ hrs. repairing Machine and Cable of Elevator
Factory No. 2 @ 1.65 per hour........................ $7.43
Carfare .... .07

$7.50

Vo. No. 1600

AETNA HARDWARE CO.

Sold To—Blank Co.

Dec. 15
Terms: 2%, 10 days net

1—3½" 200 lb. Pressure Gauge	$3.50

Vo. No. 1601

BUCK BROS.

Sold To—Blank Co.

Dec. 18
Terms: 10 days net

14—1½" Mall Ells	@ .35 ea.	4.90	
14—1½" Street Ells	@ .55 "	7.70	
		12.60	
25%			$9.45

Vo. No. 1602

HANDFORD STATIONERY CO.

Sold To—Blank Co.

Dec. 20
Terms: 2%, 10 days

1 Spring Binder #11114	2.50	
1 Pad Col. Sheets	.75	$3.25

Order #8291

Vo. No. 1603

SAXON SAND BLAST CO.

Sold To—Blank Co.

Dec. 21
Terms: 2%, 10 days

1 #16 Drive Clutch	6.00	
1 #17 Drive Clutch Pulley	15.00	$22.00

Vo. No. 1604

EVERREADY MOTOR TRUCK CO.

Sold To—Blank Co.

Dec. 2
Terms: 3%, 10 days

Part No.	*Name of Part*	*Quant.*	*Price Ea.*	*Total*
P 1366	Drive Clamps	10	3.50..............	$35.00
P 1356	Shoes	20	.50..............	10.00
				$45.00
	Less 20%			9.00
	Total			$36.00
	5% war tax.....................			1.80
				$37.80

Vo. No. 1605

WILCOX FURNITURE CO.

Sold To—Blank Co.

Dec. 8
Terms: 2%, 10 days

1 Desk & Chair..............................	65.00	
Less 2%	1.30	$63.70

Vo. No. 1606

BUILDERS SUPPLIES CO.

Sold To—Blank Co.

Dec. 26
Terms: 2%, 10 days

4000 Common Brick @ $20 M..............................	$80.00

Vo. No. 1607

BLAINE OIL CO.

Sold To—Blank Co.

Dec. 15
Terms: 2%, 10 days

50 gals. 700 Cylinder oil @ 61................	30.50	
100 gals. Engine oil @ 28................	28.00	
	58.50	
Less 10%	5.85	$52.65

Vo. No. 1608

LOW PRICE OIL CO.

Sold To—Blank Co.

Dec. 16
Terms: 2%, 10 days

1 Steel Bbl. Oil, Heavy Medium		
53½ Gallons @ .57	30.50	
Less 10%	3.05	
	27.45	
Plus Steel barrel	11.00	$38.45

Vo. No. 1609

NELSON COAL CO.

Sold To—Blank Co.

Dec. 1
Terms: 2%, 10 days

106400 lbs. or 5320 Net Tons @ 3.00	$159.60	
Less 2%	3.19	$156.41

Vo. No. 1610

POSTAL TELEGRAPH CO.

To—Blank Co.

Dec. 10

75 Telegrams sent during month of November	$250.00
(Detail omitted)	

Vo. No. 1611

FACTORY PAY ROLL

A	40 hours @ 1.50	$ 60.00	
B	42 hours @ 1.25	52.50	
C	40 hours @ 1.50	60.00	
D	38 hours @ 1.00	38.00	
E	44 hours @ 1.20	52.80	
F	39 hours @ 1.33	51.87	
G	29 hours @ 1.75	60.75	
Miscellaneous (Detail omitted)		5,980.18	
			$6,456.10

Vo. No. 1612

OFFICE PAY ROLL

John Smith	$ 70	
Fred Barnes	65	
J. K. Whistler	50	
Miscellaneous (Detail omitted)	1,375	$1,560

Vo. No. 1613

CHECK RECORD—DECEMBER

				Credit		Charge
Date	*Voucher No.*	*Check No.*	*Paid to*	*Amount of Check*	*Discount Earned*	*Accounts Payable*
1	1594	2603	Jasper Sheet Metal Co.	$ 267.17	$4.43	$ 271.60
3	1587	2604	Fairfax Leather Co.	1.33		1.33
4	1531	2605	Window Cleaning Co.	8.35		8.35
6	1599	2606	Black Powder Co.	204.24		204.24
8	1610	2607	Nelson Coal Co.	156.41	3.19	159.60
10	1596	2608	Jackson Instrument Co.	100.00		100.00
11	1605	2609	Everready Motor Truck Co.	37.80		37.80
	1560	2610	Woodcut Glass Co.	25.72		25.72
15	1545	2611	Jackson Metal Co.	243.70		243.70
	1606	2612	Wilcox Furniture Co.	63.70	1.30	65.00
18	1553	2613	Murdock Bros.	146.30		146.30
20	1611	2614	Postal Telegraph Co.	250.00		250.00
23	1608	2615	Blaine Oil Co.	52.65		52.65
	1609	2616	Low Price Oil Co.	38.45		38.45
	1584	2617	J. C. Blumer	45.90		45.90
24	1598	2618	Pacific Hardware Co.	87.61		87.61
	1591	2619	Union Electric Light Co.	453.38		453.38
26	1595	2620	Western Union	150.06		150.06
27	1590	2621	Johnstown Journal	251.20		251.20
31	1612	2622	R. Williams, Treasurer	6,456.10		6,456.10
	1613	2623	R. Williams, Treasurer	1,560.00		1,560.00
			Total	$10,600.07	$8.92	$10,608.99

VOUCHER REGISTER—DECEMBER

Vouch. No.		Credit: Accounts Payable	Charge: Coal	Charge: Brick	Charge: Stockroom	Charge: Expense Control	Charge: Cost Control
1585	Commercial Photograph Co....	$ 31.75				$ 31.75	
6	Bradbury Lumber Co..........	44.00					$ 44.00
7	Fairfax Leather Co...........	1.33					1.33
8	L. A. Sampson Co.............	4.29					4.29
9	Black & Brown...............	3.36				3.36	
90	Johnstown Journal	151.20				151.20	
1	Union Electric Light Co........	453.38				20.13	433.25
2	Commercial Photograph Co.....	12.96				12.96	
3	" " "	32.62				32.62	
4	Jasper Sheet Metal Co.........	271.60					271.60
5	Western Union	150.06				103.71	
6	Jackson Instrument Co.........	100.00					
7	Aetna Hardware Co...........	25.90			$ 25.90		
8	Pacific Hardware Co..........	87.61			87.61		
9	Black Powder Co.............	104.24					
600	James Elevator Co............	7.50					
1	Aetna Hardware Co...........	3.50			3.50		
2	Buck Bros.	9.45			9.45		
3	Handford Stationery Co........	13.25				13.25	
4	Saxon Sandblast Co...........	22.00			22.00		
5	Everready Motor Truck Co....	37.80					

6	Wilcox Furniture Co...........	65.00				65.00		
7	Builders Supply Co...........	80.00		$80.00				
8	Blaine Oil Co.................	52.65			52.65			
9	Low Price Oil Co.............	38.45			38.45			
10	Nelson Coal Co................	159.60	$159.60					
1	Postal Telegraph Co...........	250.00				250.00		
2	Factory Pay Roll.............	6,456.10					6,456.10	
3	Office Pay Roll................	1,560.00				1,560.00		
	Total	$10,429.60	$159.60	$80.00	$439.56	$2,243.98	$7,210.57	$295.89

Case No. 7

The Goodly Company started business on January 2. Its general cash book for January and February showed the following entries:

GENERAL CASH BOOK—JANUARY

Receipts				Disbursements				
Date	Received From	Discount	Amount Received	Date	Paid To	Check No.	Discount	Amount Paid
3	Subscribers to Capital Stock		$10,000	4	R	1		$ 85
5	A		500	6	Petty Cash	2		230
18	B		140	19	T	3		460
23	C	$4.00	196	21	V	4		73
28	D		150	27	W	5		22
31	E		125	30	Petty Cash	6		500
				31	Y	7		231
				31	Balance			9,510
	Total	$4.00	$11,111		Total			$11,111

GENERAL CASH BOOK—FEBRUARY

Receipts				Disbursements				
Date	Received From	Discount	Amount Received	Date	Paid To	Check No.	Discount	Amount Paid
1	Balance		$ 9,510	4	P	8		$4,000
2	M		5,000	11	S	9		275
8	B		300	15	Petty Cash	10		300
16	E		200	21	R	11		500
23	A	$6.00	594	23	S	12		6,123
25	B		100	28	W	13		264
28	C		345		Balance			4,587
	Total	$6.00	$16,049		Total			$16,049

Entries in the petty cash book for January were as follows:

PETTY CASH BOOK—JANUARY

Date	*Particulars*	*Amount*	*Date*	*Particulars*	*Amount*
6	General Cash	$ 230	3	Salaries and Expense	$ 150
8	Cash Sales	400	10	" " "	160
12	" "	300	12	Miscellaneous Expense	80
24	" "	450	17	Salaries and Expense	200
30	General Cash	500	23	" " "	200
			30	" " "	190
				Balance	900
	Total	$1,880		Total	$1,880

Entries in the petty cash book for the first seven days in February were as follows:

PETTY CASH BOOK—FEBRUARY

Date	*Particulars*	*Amount*	*Date*	*Particulars*	*Amount*
1	Balance	$900	1	Miscellaneous Expense..	$ 40
3	Cash Sales	200	2	" " ..	30
4	Cash Sales	300	3	Salaries and Expense..	800
			4	Miscellaneous Expense..	52
			6	" " ..	75
			7	" " ..	81

Copies of the bank's statements for January and February were as follows:

FIRST NATIONAL BANK

In account with Goodly Company

Statement of your Account to close of business January 31—

Date	*Checks in Detail*	*Deposits — Date*	*Amount*
		Balance Brought Forward	
6	$230	3	$10,000
8	85	18	140
20	460	24	196
30	500	29	150
		30	500
		31	125
		Balance	$ 9,836

FIRST NATIONAL BANK

IN ACCOUNT WITH GOODLY COMPANY

Statement of your Account to close of business February 28—

Date	Checks in Detail	Deposits Date		Amount
		Balance Brought Forward		$ 9,836
2	$ 73	3	.....	5,000
4	4,000	8	.....	300
7	500	16	.....	200
12	275	23	.....	594
15	300	25	.....	100
22	500	28	.....	345
24	6,123			
		Balance	....	$4,604

An auditor whose arrival on the morning of February 8 was expected counted the cash on hand at the close of business February 7 and found the following:

Checks	$146
Bills	123
Currency	53
Total	$322

He also found that all of the disbursements per the petty cash book from February 1 to 7, both inclusive, aggregating $1078, were proper. He checked the returned checks paid by the bank during January against the disbursements in the general cash book (finding no discrepancies) and listed the unpaid checks in the reconcilement as of January 31.

His reconcilement of the bank account as of January 31 was as follows:

Balance per bank statement		$9,836
Less Outstanding Checks:		
No.	*Amount*	
4..	$ 73	
5..	22	
7..	231	326
Balance per General Cash Book		$9,510

Having proved the footings of the petty cash book from February 1 to February 7 (both dates inclusive), and having found cash on hand of $322 as called for by the balance of the petty cash book, and having proved that the petty disburse-

ments from February 1 were proper, and having reconciled the bank account at January 31, the auditor rendered a certified balance sheet as of January 31, showing among the assets the following:

Cash:		
On hand	**$ 900**	
In bank	**9,510**	**$10,410**

Was the auditor's report correct? If it was not correct, explain fully the reasons why it was not.

Case No. 8

The office manager of a certain business was frequently asked by customers if they could cash their personal checks at the cashier's window. The office manager wished to be accommodating but at the same time he did not, on general principles, like the idea of starting this practice. The cashier, however, suggested that whenever a customer wished to cash a check a company's check would be drawn to the order of cash for the exact amount and charged to his (the cashier's) personal account; that checks drawn to replenish the petty cash fund would be drawn to the order of the cashier and charged to expense accounts according to the vouchers in support of the disbursements; and that checks received from customers in exchange for cash would be credited to the cashier's personal account. This arrangement suited the office manager, as he believed that as long as all checks drawn in favor of cash were charged to the personal account of the cashier—and it was easy to verify the fact that they had been so charged—the company was fully protected.

There were no cash sales nor receipts from any source except from customers in the form of checks. It will be assumed that the only way the cashier could possibly obtain currency was from the cash received to reimburse the petty cash fund or the cash received to give to customers in exchange for their checks, and that the amounts of these checks were properly charged, the second-mentioned to the cashier's personal account, and the first-mentioned to expense accounts. It will also be assumed that all checks received were duly recorded in the cash book, and that the cashier did not forge any of them.

Following is a transcript of the cash book for January:

CASH BOOK—JANUARY

Receipts			Disbursements			
Date	*Received From*	*Amount*	*Date*	*Paid To*	*Check No.*	*Amount*
1	Balance	$8,000	3	R	803	$ 323
4	A	10	5	S	804	45
	B	11	6	Cash	805	47
	C	4	15	Sundry Employees A/C of Payroll	806/20	2,800
5	D	20	17	Cashier A/C of Sundry Expenses	821	125
	E	13	19	Cash	822	93
	F	30	20	T	823	83
6	Check cashed	47	31	Cash	824	27
	C	20		Sundry Employees A/C of Payroll	825/39	2,800
8	D	12		V	840	25
	A	23		W	841	12
19	Check cashed	93		R	842	38
25	A	3		Balance		1,922
	D	5				
	B	9				
	M	1				
27	E	12				
31	Check cashed	27				
	Total	$8,340		Total		$8,340

Following are the detail of deposits actually made, although it will be assumed that true copies of the deposit slips were not available for the auditor.

Jan. 4		*Jan. 19*	
Checks.	$10	Checks...........	$60
	11		
	4		
	$25		

Jan. 5		*Jan. 25*	
Checks.	$20	Checks...........	$ 3
	13		5
	30		9
			1
	$63		$18

Jan. 6		*Jan. 27*	
Checks.	$27	Check............	$12
	20		
	$47		

Jan. 8		*Jan. 31*	
Checks.	$12	Check............	$17
	23		
	$35		

Copies of the reconcilements of the bank account at December 31 and at January 31 as prepared by the cashier were as follows:

BANK RECONCILEMENT—DECEMBER 31

Balance Per Bank Statement......................		$8,257
Less Outstanding Checks:		
No. 752	$68	
794	15	
795	83	
796	91	257
Balance Per Cash Book.		$8,000

BANK RECONCILEMENT—JANUARY 31

Balance Per Bank Statement		$2,088
Less Outstanding Checks:		
No. 752	$68	
794	15	
823	83	166
Balance Per Cash Book		$1,922

It will be assumed that there were no undeposited receipts at either December 31, or at January 31.

A transcript of the cashier's personal account was as follows:

Jan.			Jan.		
6	Check for cash	$47.00	6	Check cashed	$47.00
19	" " "	93.00	19	" "	93.00
31	" " "	27.00	31	" "	27.00

An auditor was called in on May 25 to audit the records for January. He was given the bank statement for January showing a balance at the end of the month of $2,088 and a batch of returned paid checks as follows:

No. 795	$ 83	
796	91	
803	323	
804	45	
805	47	
806/20	2,800	
821	125	
822	93	
824	27	
825/39	2,800	
840	25	
841	12	
842	38	$6,509

The auditor proved the footings of the cash book, and checked all the returned paid checks which he found in the January bundle, those drawn prior to January against the checks outstanding in the December 31 reconcilement and those drawn in January against the cash book for January. He found that the checks had all been paid and canceled by the bank; and also that they agreed in every particular with the checks recorded in the cash book for January. The

unchecked items he checked against the cashier's bank reconcilement of January 31 and found them in agreement therewith. He counted the petty cash fund on May 25, and found it in agreement with the balance called for by the petty cash account, the entries in which he verified from January 31 to May 25.

The auditor was convinced from the work which he had done that the cashier was not actually short in his bank account at January, but not being able to check the detail of the deposits against the receipts he reported as follows:

"The amount of cash in the bank as of January 31 was all that was called for by the cash book, taking into consideration the outstanding checks, but as I was unable to check the composition of the deposits against the receipts, I am unable to report whether the cashier has covered up a shortage by the deposit of borrowed money, or by the kiting of checks. With this reservation, I report that there was no shortage in the bank account."

Using the data given in this case, state whether or not the evidence indicates that there was a shortage of cash at January 31. If so, state the amount, and explain how it could be possible for the bank account to reconcile apparently so perfectly. What precautions should the auditor have taken to reveal the shortage (if there was one), in spite of the fact that he could not obtain the composition of the deposits? If there was a shortage, how could the cashier, do you think, have obtained the amount of money which he was short?

Case No. 9

Assume that an auditor was requested on April 14, 1924, to make an audit of the books of the X Company of New York for the year ended December 31, 1923. The trial balances at December 31, 1923, and at March 31, 1924, included the following account balances:

	Dec. 31, 1923	*Mar. 31, 1924*
Petty Cash (Imprest Fund)	$ 500	$ 400
National City Bank (New York)	10,200	15,726
First National Bank (Chicago)	8,243	7,200
First National Bank (New York)	12,700	8,143
Stocks	2,500	2,500
Liberty Loan Bonds (coupon bonds)	10,000	10,000
Y Company 5% bonds maturing Feb. 1, 1924	8,200	

The cashier, besides being held responsible for the bank accounts and the keeping of the cash records, was entrusted with the care of securities and negotiable instruments.

Explain how the cashier, knowing that the auditor would come some time subsequent to December 31 to audit the accounts for the year 1923 might manipulate the records in an attempt to conceal a shortage in both the petty cash and in the bank accounts at December 31, and explain, and give reasons for, the steps which the auditor should take to detect such possible manipulations. Do not consider that the cashier may have obtained personal loans to make good the shortage.

Case No. 10

Assume that an auditor was asked to make a complete audit, for the year ended December 31 preceding, of the books of a large manufacturing company called the Foresight Company located in Philadelphia. He commenced the work on May 1 and completed it on June 15.

The following end-of-the-month balances appeared on the December statements of the only banks (five in number) in which the company had money on deposit for current checking purposes at December 31:

Girard National Bank	$3,467.20
Fidelity Trust Company	743.20
Fourth St. National Bank	2,371.40
First National Bank	1,077.20
National City Bank (New York)	1,632.68

Among the accounts on the trial balance of December 31 were the following:

Petty Cash Fund—Cashier No. 1	$ 200.00	
" " " " No. 2	300.00	
" " " " No. 3	500.00	
Certificates of Deposit	4,275.00	
Unclaimed Wages		$552.75

Some of the certificates of deposit had been pledged as collateral to loans.

The following accounts were also on the books, although they did not appear on the trial balance at December 31, because they were closed out at that date:

THE PENNSYLVANIA COMPANY

Jul. 31	Deposits for month	$15,246	Jul. 31	Withdrawals for month	$14,722
Aug. 31	" " "	2,723	Aug. 31	Withdrawals for month	2,500
			Sep. 30	Withdrawals for month	747

DIVIDENDS PAYABLE

Dec. 30	Check to First National bank to pay dividends	$83,500	Dec. 15	Dividend for year ended December 31	$83,500

ACCRUED INTEREST PAYABLE

Dec. 31	Check to First National bank to pay coupons on 1st Mortgage Bonds	$15,000	Dec. 31	6 months' interest on 1st Mortgage Bonds	$15,000

The journal entries in support of the credits to Dividends Payable and Accrued Interest Payable accounts were as follows:

DEC. 15

Dividends	$83,500	
Dividends Payable		$83,500
For 5½% annual dividends on 15,000 shares of common stock (par value $100 each) declared by the board of directors today, payable Dec. 31, to stockholders of record on Dec. 20.		

DEC. 31

Interest Expense	$15,000	
Accrued Interest Payable		$15,000
For 3% semi-annual interest on $500,000 1st Mortgage Bonds payable Jan. 1.		

The auditor's arrival was entirely unexpected by the treasurer. The first thing which the auditor did on reaching the office at 9 o'clock on the morning of May 1 was to count the general cash on hand at the close of business on April 30, which he found to consist of the following items:

Bills	$295.00
Coin	80.72

Checks:

Date	*Drawer*	*Payee*	
Dec. 31	Wm. Jones	Foresight Co.	346.20
Apr. 29	Fred Huntington	Cash	250.00
Apr. 30	Frank Brown	Foresight Co.	560.23
Apr. 30	James Spencer	P. J. Wilson (endorsed)	122.60

The auditor then asked the treasurer if there was any more cash to count outside of the petty cash funds with the three different cashiers, to which the reply was "No." That afternoon, however, the treasurer said, "When you asked me if there was any more cash to count and I said 'No,' I forgot that I had in the safe $857.80 of unclaimed wages. It is our custom to keep unclaimed wages in the safe, expecting that it will be claimed, but if it is not called for in a certain length of time we deposit it and write off Unclaimed Wages account to Profit and Loss.

"I have just deposited the $857.80. You will notice by my bank reconcilements at December 31 that my bank accounts were short $552.75. This represented undeposited unclaimed wages at that date. Since then I have accumulated $305.05 more, making the $857.80 which I deposited today."

All wages were paid in currency, the treasurer drawing one check for the total payroll.

The bank statement for May, submitted to the auditor on the second of June, showed among the deposits the following items:

May 1	$1,404.75
May 1	857.80

It will be assumed that the outstanding checks at December 31, per the treasurer's reconcilements of the bank accounts, were as follows:

Girard National Bank	$2,248.90
Fidelity Trust Co.	1,823.70
Fourth St. National Bank	4,276.20
First National Bank	577.20
National City Bank	1,243.60

It will also be assumed that there were no undeposited receipts, except possibly unclaimed wages.

NOTE REGISTER

Date	Maker or Acceptor	Endorser	Rate	Term	Amount	Paid or Dis-counted	Where Discounted	Remarks
				July				
Jul. 12	John Richards	Henry Brandt	6%	1 month	$ 726	Jul. 15	First Nat. Bank	
Jul. 29	James Faulkner	Thomas Smith	6%	2 months	320	Sep. 29		
Jul. 31	Frank Bradley		6%	6 months	400	Aug. 8	Second Nat. Bank	Secured by 30 shares Union Pacific
				Total	$1,446			
				August				
Jul. 31	Thos. Kane		6%	3 months	$ 275	Oct. 31		
Aug. 3	J. L. Kitridge.......		5%	1 month	400	Sep. 3		
Aug. 18	Geo. Smith		6%	1 month	300	Sep. 18		
Aug. 27	Stephen Van Nest...		6%	2 months	800	Sep. 5	First Nat. Bank	
				Total	$1,775			
				September				
Sep. 9	John Palen		6%	1 month	$ 426	Oct. 9		
Sep. 22	Jesse Van Burke....		5%	4 months	740			Pledged with 1st Nat.
Sep. 25	James Conant	John Heffron	6%	3 months				Renewed 12/26 for one month

					October			
Oct.	5	Frank Bradley		6%	3 months	$ 823		
	8	George Smith		6%	2 months	475		
	27	H. Wigglesworth ...		6%	3 months	205		
					Total	$1,503		
					November			
Nov.	8	Henry Brandt		6%	1 month	$ 430	Dec. 8	
Nov.	29	James Spencer		6%	2 months	212	Dec. 15	Second Nat. Bank
					Total	$ 642		
					December			
Dec.	5	Francis Barker	Leslie Green	6%	1 month	$ 500		
Dec.	21	Frank Platt		6%	1 month	375		
					Total	$ 875		

to this same account. On September 25 Mr. Heffron took a note for $550 to the bookkeeper, saying, "Here is a note made out in my favor by James Conant for a debt which he owes me. I have endorsed it over to the company. Please enter and credit it to my account in the accounts receivable ledger." So the bookkeeper recorded it in the note register under date of September 25 as instructed.

Following is a transcript of the treasurer's account for the six months ended December 31:

JOHN HEFFRON

Jul.	8	Cash	$ 500	Aug.	9	Cash	$ 300
Aug.	7	Cash	200	Sep.	25	Note Receivable	550
Sep.	21	Cash	150	Oct.	27	Cash	275
Oct.	4	Cash	275	Nov.	15	Cash	175
Nov.	6	Cash	175	Dec.	16	Cash	445
Nov.	24	Cash	145				
Dec.	8	Cash	300				
		Total	$1,745			Total	$1,745

A transcript of the note register for the same period appears on page 404.

A summary of cash receipts for the six months ended December 31 showed credits to Notes Receivable as follows:

Jul.	$ 726
Aug.	400
Sep.	1,820
Oct.	701
Dec.	642
	$4,289

The cashier's reconcilement of the bank accounts at December 31 was as follows:

First National Bank:		
Balance per Bank Statement	$2,000	
Less Outstanding Checks	800	$1,200
Second National Bank:		
Balance per Bank Statement	$5,422	
Less Outstanding Checks	725	4,697
Third National Bank:		
Balance per Bank Statement	$1,500	
Less Outstanding Checks	0	1,500
Undeposited receipts, Dec. 31		845
Balance per Cash Book		$8,242

A transcript of Trade Notes and Acceptances Receivable account for the six months ended December 31 was as follows:

TRADE NOTES AND ACCEPTANCES RECEIVABLE

Jul. 31		$1,446	Jul. 31	Cash	$ 726
Aug. 31		1,775	Aug. 31	Cash	400
Sep. 30		1,716	Sep. 30	Cash	1,820
Oct. 31		1,503	Oct. 31	Cash	701
Nov. 30		642	Dec. 31	Cash	642
Dec. 31		875	Dec. 31	Balance	3,668
		$7,957			$7,957

An auditor commenced, promptly at the close of business on December 31, an audit of the books of the Burnside Manufacturing Company for the year ended December 31. The first thing he did was to call for the notes receivable portfolio in which he found the following notes and memorandum:

Date	*Maker or Acceptor*	*Endorsed By*	*Term*	*Amount*
Oct. 5	Frank Bradley	None	3 months	$ 823
Dec. 5	Francis Barker	Leslie Green	1 month	500
Oct. 8	Geo. Smith	None	2 months	475
Dec. 21	Frank Platt	"	1 month	375
Dec. 26	James Conant	"	1 month	550
Oct. 27	Henry Wigglesworth	"	3 months	205
Memo:				
	Pledged with First National Bank, Note of Jesse Van Burke dated Sep. 22, for 4 months	"		740
	Total per General Ledger account balance			$3,668

Explain the auditing procedure which the auditor should adopt in connection with verifying the trade notes and acceptances receivable account at December 31, giving reasons for each step taken. Are there any indications of fraud? If so, explain them and tell what the auditor should do to satisfy himself that fraud had been committed. What adjustments, if any, should be made on the books as of December 31?

Case No. 12

The Greathart Manufacturing Company of Camden, New Jersey, engaged an auditor early in December to audit its books for the year ended December 31, 1923. The president was particularly anxious to have the customers' accounts

confirmed, because he was afraid that they had been manipulated. The auditor explained that he could not possibly begin the real audit work before February 1, but that he would be on hand January 4 to attend to the mailing of confirmation forms with the company's monthly statements; and that he would attend to the mailing of second and third requests (if they were necessary) during January. This arrangement was satisfactory to the president and was carried out accordingly.

The auditor was requested by the president to include in his report on the audit the number of customers' accounts actually confirmed and the ratio which these bore to both the total number of accounts and the total amount receivable. He was further requested to include an analysis of the accounts as to their age and to report any evidence of fraud. In regard to the age of the accounts, the president asked the auditor to include in his report the total amount not due at December 31, and the total amounts past due less than one month, one to two months, two to four months, and over four months.

The terms of sale were 2% ten days, 30 days net.

Following are transcripts to February 29, 1924, of the individual customers' accounts which showed balances at December 31, 1923. It may be assumed that all of the other accounts (too numerous to copy here) were correct and had not been falsified in any way. Street addresses have been purposely omitted.

ADAMS, FRANCIS

DALLAS, TEXAS

1922			
Jan.	5	Invoice	$500.22

ADAMS, GEORGE

NEW YORK, N. Y.

1923				*1923*			
Jun.	8	Invoice	$405.25	Aug.	15	Cash	$405.25
Jun.	26	"	375.72	Sep.	12	Returns	175.72
Jul.	5	"	80.30	Sep.	15	Cash	200.00
Jul.	16	"	254.60	Oct.	8	"	80.30
Jul.	31	"	132.70	Nov.	26	"	254.60
1924				*1924*			
Jan.	8	"	126.93	Jan.	12	"	132.70
Jan.	31	"	210.45	Jan.	15	"	126.93

BARNES, WILSON

PHILADELPHIA, PA.

1923				1923			
Jan.	8	Inv	$147.92	Jan.	15	Cash	$147.92
Aug.	7	'	210.32	Aug.	17	"	210.32
Sep.	8	'	50.60	Sep.	19	"	50.60
Nov.	10	'	12.30				
Dec.	5	'	153.69				

CARPENTER, RUSSEL

NORFOLK, VIRGINIA

1923				1923			
Feb.	7	Invoice	$112.35	Apr.	14	Net Proceeds, account sale....	$135.60
Mar.	26	"	543.71	Apr.	25	Net Proceeds, account sale....	625.90
Apr.	9	"	265.30	May	10	Net Proceeds, account sale....	722.75
Nov.	14	"	310.70				

DAWES, HERBERT

DOVER, DELAWARE

Account pledged to Peter Hawkins of Camden, New Jersey, with guarantee of collection.

1923				1923			
Jan.	8	Invoice	$275.96	Jan.	8	Cash	$206.97
Jan.	28	Cash	144.22	Jan.	25	"	200.00
Jan.	31	Invoice	623.44	Jan.	31	"	467.58
Feb.	8	"	275.64	Feb.	8	"	206.73
Mar.	6	Cash	625.43	Mar.	5	"	891.72
Mar.	26	"	223.49	Nov.	5	"	260.19
Nov.	5	Invoice	346.92				

FULLER, NATHAN

WILKES-BARRE, PA.

1923				1923			
Dec.	21	Invoice	$275.30	Dec.	31	Cash	$375.30

LONSBERRY, HARRY

NEW YORK, N. Y.

1923				1923			
Mar.	5	Invoice	$673.20	Apr.	8	Cash	$800.00
Apr.	8	"	210.40	Jun.	12	"	500.00
May	10	"	571.22	Jul.	13	"	200.00
Jul.	12	"	237.60	Sep.	25	"	200.00
Aug.	27.	"	146.90	Oct.	5	"	50.00
Aug.	31	"	45.61				
Oct.	26	"	412.90				
Dec.	28	"	326.45				

MORRIS, BLAKELY

DALLAS, TEXAS

1923			
Apr.	8	Invoice	$230.61
Jun.	10	"	275.32
Nov.	12	"	48.20
Dec.	22	"	35.10

PATERSON, ROBERT

PHILADELPHIA, PA.

1923				*1923*			
Oct.	12	Invoice	$110.70	Oct.	26	Claim	$ 25.70
Nov.	13	"	261.30	Nov.	5	Note .	. 85.00
Dec.	5	Note	85.00				

ROBERTS, HARVEY

NEW YORK, N. Y.

1923				*1923*			
Jan.		Invoice	$115.00	Jan.	22	Cash	$115.00
Feb.		"	210.50	Feb.	19	"	210.50
May		"	143.60	May	18	"	143.60
Jun.		"	230.25	*1924*			
Sep.		"	126.95	Jan.	12		100.00
1924							
Jan.	7		50.23				
Jan.	31		263.90				

SAMPSON, JAMES

SAN FRANCISCO, CALIFORNIA

1923				*1924*			
Nov.	12	Invoice	$475.00	Jan.	2	Cash	$475.00
Dec.	8	"	325.00	Jan.	31	"	325.00

THOMPSON, ROBERT

SAN FRANCISCO, CALIFORNIA

1923				*1923*			
Mar.	12	Invoice	$723.10	Mar.	31	Cash	$723.10
Apr.	30	"	50.62	May	15	"	50.62
Jul.	12	....	210.30	Jul.	31	"	210.30
Jul.	15	Freight	12.35	Aug.	18	"	12.35
Dec.	5	Invoice	30.60	*1924*			
Dec.	27	....	43.75	Jan.	2		30.60

VARNEY, FRANK

St. Louis, Mo.

1923				*1923*			
Oct.	7	Invoice	$ 22.30	Oct.	17	Cash	$ 22.30
Nov.	10		70.35	Nov.	20		70.35
Dec.	8		110.50				

WILLIAMS, FRANK

Buffalo, N. Y.

1923			
Jan.	5	Invoice	$275.00
Feb.	9	"	360.00

WILSON, JAMES

New York, N. Y.

1923				*1923*			
Jul.	12	Invoice	$243.22	Aug.	15	Cash	10.00
Sep.	8	"	112.95	Sep.	15		10.00
				Oct.	15		10.00
				Nov.	15		10.00
				Dec.	15		10.00
				1924			
				Feb.	24		306.17

WILLIAMS, PETER

Camden, N. J.

1923			*1923*			
Jan.	8	$ 46.33	Feb.	21	Cash	$156.73
Feb.	20	110.40	Apr.	1	"	260.30
Mar.	21	260.30	Jun.	22	"	10.75
Apr.	14	50.23	Aug.	31	"	99.85
Jun.	12	10.75	Sep.	30	"	80.92
Jul.	8	49.62				
Aug.	23	50.23				
Sep.	25	80.92				
Oct.	27	95.43				

The account of Herbert Dawes was pledged to Peter Hawkins as security under an agreement whereby Hawkins was to advance immediately 75 per cent of each invoice rendered to Dawes, the advances to be returned out of Dawes' remittances as soon as they were received.

Following are transcripts of the controlling account and the reserve for uncollectible accounts:

CUSTOMERS' ACCOUNTS

1923				1923			
Jan.	1	Balance	$ 5,671.22	Jan.	31	Cash	$10,000.10
Jan.	31	Sales	8,798.98	Feb.	28	"	2,500.20
Jan.	31	Cash	144.22	Mar.	31	"	8,000.43
Feb.	28	Sales	7,241.90	Apr.	30	"	9,563.96
Mar.	31	"	4,497.38	May	31	"	7,400.23
Mar.	31	Freight	235.70	Jun.	30	"	7,105.47
Mar.	31	Cash	848.92	Jul.	31	"	5,234.70
Apr.	30	Sales	6,825.40	Aug.	31	"	6,231.93
May	31	"	7,210.95	Sep.	30	"	6,500.91
Jun.	30	"	6,927.40	Oct.	31	"	4,100.50
Jul.	31	"	6,500.25	Nov.	5	Notes Receivable	85.00
Jul.	31	Freight	272.30	Nov.	30	Cash	5,800.75
Aug.	31	Sales	7,243.70	Dec.	31	"	6,900.64
Sep.	30	"	6,299.81	Dec.	31	Balance	4,967.32
Oct.	31	"	4,325.70				
Nov.	30	"	5,625.40				
Dec.	5	Notes Receivable	85.00				
Dec.	31	Sales	5,637.91				
		Total	$84,392.14			Total	$84,392.14

RESERVE FOR UNCOLLECTIBLE ACCOUNTS

1923				1923			
		Accounts written off:		Jan.	1	Balance	$ 5,946.23
Aug.	8	Samuel Harris	$ 563.90	Dec.	31	Profit and Loss	6,000.44
Nov.	3	Thos. Talcott.	237.60				
Dec.	9	Frank Harlow	472.10				
Dec.	1	Balance	10,673.07				
		Total	$11,946.67			Total	$11,946.67

When the auditor arrived on January 4, all confirmation forms were handed to him completely prepared and duly approved by the president. The auditor mailed them all on the same day. Confirmations stood as follows on January 20:

Date Received	*Name*	*Amount*	
Jan. 10	Wilson Barnes	$165.99	
Jan. 11	Russel Carpenter	310.70	
Jan. 11	Nathan Fuller	100.00	(Credit Balance)
Jan. 15	Herbert Dawes	430.24	
Jan. 19	Blakely Morris	589.23	

On January 20 the auditor sent out second requests for confirmations to all those who did not respond to the first, and by January 31 he had received the following:

Date Received	*Name*	*Amount*
Jan. 25	Robert Paterson	$346.50
Jan. 28	Frank Williams	635.00
Jan. 29	Frank Varney	94.75
Jan. 31	Robert Thompson	0

Mr. Varney noted on his confirmation form that he had returned merchandise to the value of $15.75, and attached a copy of a credit memorandum dated September 25 for that amount for which he said his account had apparently never been credited.

Third requests were mailed by the auditor on January 31 to all customers who had not replied to the first or second requests, but these also were ignored.

The auditor completed his audit of customers' accounts on February 15 and the whole audit on February 28.

Given the foregoing information:

(a) Submit a form of working sheet which the auditor could advantageously use to keep track of the confirmations and to analyze the accounts in the manner requested by the president. Fill in this form as the auditor might be expected to do and explain how you arrived at the amounts shown.

(b) State the steps to be taken by the auditor in connection with the verification and confirmation of the accounts, and explain how he should arrive at the amounts and percentages confirmed to be included in his report to the president.

(c) Illustrate the method of setting up the accounts on the balance sheet.

(d) Write the comments on the customers' accounts to be included in the report on the audit, giving the president not only the information which he specifically requested but also any other facts which you think should be called to his attention in the report on the audit.

Is there any evidence of fraud? If so, explain the auditing procedure which would reveal the attempt to conceal the shortage.

What adjustments, if any, should be made on the books as of December 31? Give reasons for your answer.

Case No. 13

The facts in this case are assumed as follows:

1. Company *A*, a large export concern in New Orleans, does business with a great many customers in South America and in Europe.

2. Mr. *X* is a trusted manager of the South American department of Company *A*.

3. South American customers visiting the United States stop and call at the office of Company *A*. Those who do not have banking facilities in this country often ask for comparatively large sums of cash, requesting that these advances be charged to their accounts current.

4. Accounts current are sent to customers every six months, at which time the company's auditor mails accompanying confirmation forms. Before the accounts current (which are prepared by the accounting department) are mailed, however, they are reviewed and signed by the department managers. Charges and credits to wrong accounts are often detected in this way, the errors having arisen on account of the bookkeepers' unfamiliarity with foreign names and on account of the similarity of many of the names.

5. Mr. *X* was in the habit of sending receipts (signed by himself) to the cashier whenever South American customers called at his office and asked for advances. Each receipt indicated the customer's account to be charged. The cashier accepted the receipts as proper requisitions for cash and also as his vouchers for the disbursements. He always filled the requisitions and took the cash to *X* without even questioning *X*'s integrity, as *X* had been with the company a great many years and was highly thought of. To even hint that this procedure was not correct would, to the cashier's mind, have been the equivalent of insulting *X*. In many instances, *X* had had no request for money from a customer. In these cases he pocketed the cash himself, without the knowledge of the cashier. He kept a memorandum of the accounts charged with the amounts which he secured in this manner.

6. *X* confined the charges for the money wrongfully obtained by him to, let us say, three accounts, namely, *C, D* and *E*.

7. The accounts were audited semi-annually.

8. The confirmation forms were made up by the office force, approved by the department managers, and handed to the auditor shortly after the end of the six months' period, together with the accounts current duly signed by the department managers and envelopes addressed to the customers.

9. In connection with the confirmation of accounts at December 31, 1923, the auditor noticed a discrepancy between the addresses on the envelopes for *C, D* and *E,* and the addresses on their accounts current. The addresses on the accounts current were cities in South America, whereas the envelopes appeared as follows:

A Company
New Orleans
South American Dept.

C
232 Carondelet St.
New Orleans

A Company
New Orleans
South American Dept.

D
Grunewald Hotel
New Orleans

A Company
New Orleans
South American Dept.

E
St. Charles Hotel
New Orleans

The accounts current showed charges for invoices as well as for cash advances, and credits for remittances.

When the auditor called the attention of the manager of the South American department to the addresses on the aforementioned envelopes, the manager replied, "*C*, *D* and *E* have just arrived from South America on a business trip to the United States. I had the envelopes addressed to their present addresses so that you would receive the confirmation returns reasonably soon. These customers will be in this country some time, I understand, and if their confirmation forms are sent to South America, I doubt if they will ever be returned. The chances are that they will be mislaid or destroyed before *C*, *D* and *E* reach home."

The auditor was satisfied with this explanation and accepted the envelopes. He enclosed in each, along with the confirmation form, an envelope addressed to himself, and personally mailed the envelopes to *C*, *D* and *E*. The forms were not out of his possession or control between the time when he checked them against his working schedule and the time when he mailed them. In due course the auditor received, in the same self-addressed envelopes which he had enclosed in the other envelopes, the confirmations as "O.K.," signed *C*, *D* and *E* respectively, whereupon he noted on his working sheet that these accounts had been confirmed as correct.

Knowing as you do that the charges for cash advances appearing in the accounts current of *C*, *D* and *E* were improper and that they represented money misappropriated by *X*, give a reasonable explanation, without assuming carelessness or collusion on the parts of *C*, *D* and *E*, why the auditor received the confirmation forms signed by *C*, *D* and *E*.

In what way, other than possibly by having mailed the confirmation forms to South America or by having called in person at the aforementioned addresses (which would be unusual auditing procedure), could the auditor have prevented his being deceived in this manner?

Outline a system of internal check which would have prevented *X* from misappropriating the cash in the first place.

Case No. 14

Assume that you were engaged as an auditor to audit the books of Company *B*, a manufacturing company, for the year ended December 31, 1923, and that you began your work as soon as the taking of the inventory and the computation of the inventory sheets had been completed, on January 15.

The following include all of the closing journal entries pertaining to the inventories, and certain other journal entries that had been made:

Cost of Sales	$5,279.40	
Finished Goods		$5,279.40
To close out the inventory at January 1.		
Finished Goods	$8,723.90	
Cost of Sales		$8,723.90
To set up the inventory at December 31.		
Cost of Manufacture	$3,479.60	
Work in Process		$3,479.60
To close out the inventory at January 1.		
Work in Process	$1,527.78	
Cost of Manufacture		$1,527.78
To set up the inventory at December 31.		
Materials (Inventory)	$81,360.48	
Materials		$81,360.48
To set up inventory at December 31.		
Factory Supplies (Inventory)	$2,559.80	
Factory Supplies		$2,559.80
To set up inventory at December 31.		
Cost of Manufacture	$118,500.35	
Materials		$ 40,000.00
Direct Labor		35,742.90
Heat, Light and Power		5,621.45
Superintendence		5,490.00
Indirect Labor		8,721.00
Depreciation of Plant and Equipment		2,000.00
Office Salaries		6,125.00
Miscellaneous Factory Expense (including all other overhead items such as proportions of administrative salaries, etc.)		14,800.00
To close latter accounts into former.		
Cost of Sales	$120,452.17	
Cost of Manufacture		$120,452.17
To close the balance of the latter account into the former.		

Following are condensed transcripts of Finished Goods, Work in Process, Materials, and Factory Supplies accounts:

FINISHED GOODS

1922				*1923*			
Dec. 31	Inventory:			Dec. 31	Cost of Sales		$5,279.40
	Material	$3,529.40					
	Labor	500.00					
	Overhead	1,250.00	$5,279.40				
			$5,279.40				$5,279.40
1923							
Dec. 31	Inventory:						
	Material	$5,923.90					
	Labor	800.00					
	Overhead	2,000.00	$8,723.90				

WORK IN PROCESS

1922				*1923*			
Dec. 31	Inventory:			Dec. 31	Cost of Manufacture		$3,479.60
	Material	$1,492.83					
	Labor	567.65					
	Overhead	1,419.12	$3,479.60				
			$3,479.60				$3,479.60
1923							
Dec. 31	Inventory:						
	Material	$1,277.35					
	Labor	71.55					
	Overhead	178.88	$1,527.78				

MATERIALS

1922			*1923*		
Dec. 31	Inventory	$ 60,900.23	Dec. 31	Cost of Manufacture	$ 40,000.00
1923					
Dec. 31	Purchases for the Year	60,460.25	Dec. 31	Inventory	81,360.48
		$121,360.48			$121,360.48
1923					
Dec. 31	Inventory	$ 81,360.48			

FACTORY SUPPLIES

1922			*1923*		
Dec. 31	Inventory	$ 1,623.20	Dec. 31	Miscellaneous Factory Expense	$ 2,500.00
1923					
Dec. 31	Purchases for the Year	3,436.60	Dec. 31	Inventory	2,559.80
		$ 5,059.80			$ 5,059.80
1923					
Dec. 31	Inventory	$ 2,559.80			

Following are transcripts of the inventory sheets and a summary thereof:

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 1
Extended By *D*
Checked By *E*
Examined By *F*

Description	*Size or Number*	*Quantity*	Weight *Each*	Weight *Total*	*Per*	Value *Cost*	Value *Market*	*Lower Extension*	*Inventory Reduction*
Productive Materials in Store									
Malleable Iron Castings	1531	4				$1.02	$ .758	$ 3.03	$ 1.05
Malleable Iron Castings	2510	2				1.92	1.40	2.80	1.04
Malleable Iron Castings	4515	5905				1.42	1.36	8,030.80	354.30
Malleable Iron Castings	4516	6162				.65	.62	3,820.44	184.86
Cast Nuts	8358	752				.09	.10	67.68	
Cotter Pins	3/16 x 1	4000				.678 M	.678 M	2.71	
Lock Washers	5/16 x 1/8 x 3/32	10,000				.58 M	.58 M	5.80	
Pinion Forging	4748	169				1.14	.96	162.24	30.42
Side Gear Forging	5502	774				.858	.85	657.90	6.19
Seamless Steel Tubing	2 9/16 x 1/4	753 ft.				.72	.725	542.16	
Cold Rolled Steel Rd.	3/4"	404 ft.				.04	.042	16.16	
Hex Cold Drawn Screw Steel	9/16" #12	351,392 ft.				.07	.078	24,597.44	
Nickel Steel Rd. 3½%	.760 #2	4032				.11	.119	443.52	
Inter-Company Purchases									
New Departure Radax Bearing	#0208	8029				1.55	1.60	12,444.95	
New Departure Radax Bearing	#306	5298				2.205	2.50	11,682.09	
Cold Rolled Steel Rd.	2 5/16 #17	2221 ft.				.50	.55	1,110.50	
				Total				$63,590.22	$577.86

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 2
Extended By *D*
Checked By *E*
Examined By *F*

			Weight		Value				
Description	*Size or Number*	*Quantity*	*Each*	*Total*	*Per*	*Cost*	*Market*	*Lower Extension*	*Inventory Reduction*
		Productive Materials (Special)							
Bar Stock #1 BP 5880	$1\frac{5}{8}$ Rd.	10899 ft.				$ .1869	$ .1870	$2,037.02	
Forgings BP 5889	5893	1741				.35	.38	609.35	
Bronze Castings BP 5892	5892	1168				.55	.56	642.40	
Bar Stock #2 BP 7487	$1\frac{7}{16}$ Rd.	2903 ft.				.3813	.39	1,106.91	
				Total				$4,395.68	

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 3
Extended By *D*
Checked By *E*
Examined By *F*

			Weight		Value				
Description	*Size or Number*	*Quantity*	*Each*	*Total*	*Cost Each*	*Total Cost*	*Market Per Ton*	*Lower Extension*	*Inventory Reduction*
				Productive Materials (Specials) Scrap					
Forgings M 7066 CS	6508 cs.	380	18	6,840	$1.55	$573.50	$15.97	$48.31	$525.19
Forgings M 2811 CS	3062	184	5	920	.80	147.20			
Forgings M 2811 CS	3062	2	5	10	.74	1.48			
Forgings M 3981 CS	3941	115	4	460	1.92	220.80			
				1,390		$369.48	15.97	8.20	361.28
				Total				$56.51	$886.47

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 4
Extended By *D*
Checked By *E*
Examined By *F*

			Weight			Value			
Description	*Size or Number*	*Quantity*	*Each*	*Total*	*Per*	*Cost*	*Market*	*Lower Extension*	*Inventory Reduction*
Productive Materials at Outside Points (Undergoing Special Processes)									
Jamestown Manufacturing Co.									
Round Nickel Steel	2 9/16″	1700 lb.			lb.	$ .0525	$ .0540	$ 89.25	
Wilson Manufacturing Co.									
Open Hearth Steel St. Carbon	6 x 15/16	79635 lb.			lb.	.02175	.025	1,732.06	
				Total				$1,821.21	

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 5
Extended By *D*
Checked By *E*
Examined By *F*

Invoice No.	*Date*	*Vendor's Name*	*Expense Material*	*Productive Material*
		Materials in Transit		
8218	Dec. 12	Brown Pulverizer Co.	$ 39.20	
7536	Dec. 29	Brown Pulverizer Co.	150.40	
7538	Dec. 30	Brown Pulverizer Co.	81.18	
7537	Dec. 31	Brown Pulverizer Co.	36.08	
8225	Dec. 29	Gooding Oil Co.		$910.58
8267	Nov. 30	Larkin Bros. Refining Co.	41.04	
7540	Dec. 31	Brown Pulverizer Co.	38.28	
		Divisions & Allied Companies		
8033	Dec. 22	Ajax Co.	101.25	
7873	Dec. 18	Farmington Co.	98.85	
			$ 586.28	$910.58
			910.58	
			$1,496.86	

INVENTORY RAW STOCK

Date *12/31/23*
Written By *A*
Called By *B*
Priced By *C*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 6
Extended By *D*
Checked By *E*
Examined By *F*

Description	*Size or Number*	*Quantity*	Weight *Each*	Weight *Total*	*Per*	Value *Cost*	Value *Market*	*Lower Extension*	*Inventory Reduction*
		Supplies							
White Ash		188			gal.	$ .0457	$ .046	$ 8.59	
Gasoline		664			gal.	.22	.23	146.08	
Cyanide		1000			lb.	2.05	2.06	205.00	
Top Cutting Oil		2255			gal.	.32	.33	721.60	
Fuel Oil		15286			gal.	.055	.056	840.73	
Dark Blue Gloss Paint	#807 D.C.W.	3			qt.	.80	.85	2.40	
Gravel		651800			lb.	.000625	.000630	407.38	
Koalin		58300			lb.	.00187	.00190	109.02	
Nipples	1/8 x 2½	12			pc.	.0256	.026	.31	
Steel Pipe	1½"	148 7/12			ft.	.1258	.1260	18.69	
				Total				$2,459.80	

INVENTORY STOCK IN PROCESS AND FINISHED GOODS

Date 12/31/23
Written By *G*
Called By *H*
Priced By *J*

Note: Before writing, pricing or extending these inventory sheets, be sure to familiarize yourself with the latest inventory instructions.

Sheet No. 7

Extended By *J*
Checked By *K*
Examined By *L*

					Weight		Material			Labor		
Name	*Condition*	*Description*	*Blue Print No.*	*Quantity*	*Each*	*Total*	*Cost Each*	*Market Each*	*Lower Extension*	*Cost Each*	*Total*	*Final Extension*
						Work in Process						
Screws	Rep.	Drill	1456	1000			Per Doz. $ .160		$ 13.33	Per Doz. $ .044	$ 3.67	$ 17.00
Beo. Gen.	O.K.	Finish	1505	4		Obsolete						
Sleeve	O.K.	Finish	1531	31		Obsolete						
Sleeve	O.K.	Sand Blas.	1539	12	Each .9	10.8	Each .144	Each $ .145	1.73	Each .032	.38	2.11
Sleeve	O.K.	Finish	1539	1239	Each .9	1115.1	Each .144	Each .145	178.42	Each .039	48.32	226.74
Bolts	O.K.	Finish	1610	467	Per Doz. .8		Per Doz. 1.29	Per Doz. 1.31	602.32	Per Doz. .049	1.91	604.23
Spiders	O.K.	Finish	2741	1632	Per Doz. 1.3	2121.6	Per Doz. .300	Per Doz. .295	481.44	Per Doz. .127	17.27	498.71
							Total		$1,277.35		$71.55	$1,348.79
						Finished Goods						
		Detail Omitted							$5,923.90		$800.00	

SUMMARY OF INVENTORY SHEETS

No.			*Amount*	*Basis of Valuation*
1	Productive Materials in Store...	$63,590.22		The lower of Cost or Market
2	Productive Materials (Specials)	4,395.68		Cost
3	Productive Materials (Specials) Scrap	56.51		Market
4	Productive Materials at Outside Points	1,821.21		Cost
5	Materials in Transit............	1,496.86		Cost
	Total Productive Materials..		$71,360.48	
6	Supplies		$ 2,559.80	The lower of Cost or Market
7	Work in Process:			
	Material	$ 1,277.35		The lower of Cost or Market
	Labor	71.55		Cost
	Overhead	178.88		250% of Labor
	Total Work in Process......		$ 1,527.78	
8	Finished Goods:			
	Material	$ 5,923.90		The lower of Cost or Market
	Labor	800.00		Cost
	Overhead	2,000.00		250% of Labor
	Total Finished Goods.......		$ 8,723.90	

Explain and give reasons for the various steps which you should take to verify the given inventories as of December 31. Also report the nature and extent of any errors or irregularities which you may find in connection with the inventory or inventory sheets.

What adjustments, if any, should be made as the result of verifying the inventory from the data given?

Case No. 15

A general contractor, engaged in constructing all kinds of buildings, including office buildings, factories, and private

dwellings, on the flat price basis, called in an auditor to audit his accounts for the year ended June 30. A ledger account had been opened for each contract. Among the various ledger accounts was one covering a contract to build a nine-room frame house for $20,000, known as contract #115.

Under the terms of the contract, the purchaser agreed to advance one-quarter of the contract price, less 3% as protection against imperfect work, as soon as each one-quarter of the work (in proportion to the total cost) was completed, approximately. When the contract was completed and the work was approved by the purchaser's architect, the final amount was due. On June 28 the purchaser was billed for the third quarterly payment.

The bookkeeper charged costs of construction to the various contract accounts and credited cash received from the purchasers thereto. No accounts were kept with purchasers, but memorandum notations as to bills rendered were made on the contract accounts.

An analysis of the debits and credits to contract #115 from May 15 to June 30 was as follows:

Debits:		
Excavation Work:		
Labor, Teams, etc., Excavating and Hauling Dirt	$ 500	
Labor, Teams, etc., Excavating and Hauling 15,000 Cubic Yards of Rock	7,500	$8,000
Masonry Work:		
Brick	$ 200	
Crushed Stone	75	
Cement and Sand	150	
Concrete Forms	500	
Plaster	300	
500 Cubic Yards Concrete	800	2,025
Carpentry Work (Including Sheet Metal Work):		
Labor of Carpenters	$3,000	
Framing Lumber	1,500	
Finishing Lumber (including siding, doors and sash)	2,000	
Roofing and Sheet Metal	650	
Incidentals	150	7,300
Total Debits		$17,325
Credits:		
Payments on account		9,700
Balance, June 30		$7,625

The following liberal estimate to complete the job was given to the auditor:

Plumbing:		
Labor	$ 350	
Materials	250	$ 600
Heating:		
Labor of Installing Hot Air Furnace and Pipes	$ 400	
Furnace and Pipes	900	
Steam Radiators	350	1,650
Outside Painting		700
		$2,950

Outline briefly the audit procedure in connection with this account. State the amount of profit or loss which should be included in a statement of profit and loss for the year ended June 30 in respect to this contract and the amount at which the contract should be valued on the balance sheet, showing how you arrived at your figures. Also submit adjusting journal entries to take up the amount of profit earned to June 30 in respect to this contract and to set up the proper accounts with contract #115 and with the purchaser.

Case No. 16

An auditor was engaged to make an audit of the Brakeville Company, a large mercantile concern of New York City, for the year ended March 31, 1924. He started work with one assistant promptly on April 1. After counting the cash, the auditor said that he would like to count the securities. It happened that part of these were in a safe in the president's office, and part in a safe in the cashier's cage. The senior auditor chose to count the securities in the president's office and told the junior to count those in the cashier's safe.

In the middle of the examination the junior went to the place where the senior was working to ask whether the last coupon attached to each bond should be examined or not. The senior merely replied, "No, that is only unnecessary work, since you are verifying the Securities accounts." Whereupon the junior returned to his work. No representative of the company was present at either count.

The two auditors each listed the securities as they counted them. The senior then consolidated the two sheets into one for his working papers and destroyed the original sheets as being unnecessary. The working sheet, after market valuations were computed by the auditor, appeared as follows:

COUNT OF SECURITIES

Stocks

No. of Shares	Par Value Per Share	Description	Market Price March 31 Per Share	Amount
45	$100	Pacific Oil	49¾	$2,238.75
20	100	U. S. Rubber	30	600.00
25	100	U. S. Steel	97½	1,437.50
12	100	Canadian Pacific R. R.	143¼	1,719.00
10	100	Northern Pacific R. R.	50½	505.00
112				$6,500.25
Add 10 Shares Montgomery Ward (Pledged) @ $23..				230.00
				$6,730.25

Bonds

No. of Bonds	Par Value Per Bond	Description	Market Price March 31 Per cent of Par	Amount
8	$1000	American Telephone and Telegraph Collateral Trust 4s, 1929	93⅝	$7,490.00
3	100	Chicago, Milwaukee & St. Paul 4½s, 1932	62	1,860.00
5	100	*X* Company 6s, 1922	(cost)	560.00
16				$9,910.00

RECONCILIATION WITH LEDGER ACCOUNT

	Stocks	Bonds
On Hand	112	16
Pledged	10	..
Total per General Ledger balance	122	16

A transcript of the Stocks account for the year ended March 31, 1924, was as follows:

Date	*Shares*	*Description*	*Amount*	*Date*	*Shares*	*Description*	*Amount*
1923				*1924*			
May 22	10	Montgomery Ward	$ 185.00	Jan. 28	5	Pacific Oil	$ 272.50
Jun. 13	12	New York Central............	1,249.50	Jan. 30	2	N. Y. Central..................	208.00
Jun. 27	20	U. S. Rubber	770.00	Feb. 1	10	N. Y. Central.................	1,053.75
Jul. 5	25	U. S. Steel	2,231.25	Mar. 29	113	Continental Can	5,198.00
Jul. 17	90	Continental Can	4,083.75				
1924							
Jan. 4	50	Pacific Oil	2,412.50				
Jan. 5	12	Canadian Pacific	1,743.00				
Jan. 10	10	Northern Pacific	547.50				
Feb. 4	10	Continental Can	550.00				
Feb. 15	3	Continental Can	165.00				
Mar. 5	10	Continental Can	495.00			Balance	7,700.25
			$14,432.50				$14,432.50

A transcript of the Bonds account for the year ended March 31, 1924, was as follows:

Date	*No. of Bonds*	*Description*	*Amount*	*Date*	*No. of Bonds*	*Description*	*Amount*
1923				*1923*			
Apr. 1				Dec. 28	2	Kingdom of Belgium..........	$ 1,958.75
(Balance)	5	*X* Company	$ 560.00	*1924*			
Jul. 13	2	Amer. Smelt. & Ref. Co........	2,055.83	Mar. 21	2	American Smelt. & Ref. Co....	1,894.72
Jul. 31	5	Kingdom of Belgium..........	5,093.75				
Aug. 24	8	Amer. Tel. & Tel..............	6,967.11	Balance	16		9,823.22
Total	20		$14,676.69	Total	20		$14,676.69

The directors of the Continental Can Company declared a stock dividend of 5% in favor of stockholders of record on February 6, payable February 15, 1924.

Following are particulars as to the entries in the cash book and journal in support of the items in Bonds and Stocks accounts.

CASH RECEIPTS

Date	Particulars	Amount Received	Debit Account	Debit Amount	Credit Account	Credit Amount
1923						
Dec. 28	2 Kingdom of Belgium, 7½% 1945 bonds interest payable June 1 and Dec. 1, @ 97⅜..	$1,955.75	Commissions	$3.00	Bonds	$1,958.75
1924						
Jan. 28	5 Shares Pacific Oil @ 54½..................	270.80	Commissions	1.50	Stocks	272.50
			Taxes	.20		
Jan. 30	2 Shares N. Y. Central @ 104................	206.42	Commissions	1.50	Stocks	208.00
			Taxes	.08		
Feb. 1	10 Shares N. Y. Central @ 105⅜.............	1,051.85	Commissions	1.50	Stocks	1,053.75
			Taxes	.40		
Mar. 21	2 M Amer. Smelt. and Ref. Co. 5% bonds of 1947, interest payable Apr. 1 and Oct. 1 @ 92⅜	1,891.72	Commissions	3.00	Bonds	1,894.72
Mar. 29	113 Shares Continental Can @ 46..............	5,176.53	Commissions	16.95	Stocks	5,198.00
			Taxes	4.52		

CASH DISBURSEMENTS

Date 1923	Particulars	Amount Paid	Debit Account	Debit Amount
May 22	10 Shares Montgomery Ward & Co. @ 18½............	$ 186.50	Stocks Account	$ 185.00
			Commissions	1.50
Jun. 13	12 Shares New York Central R. R. @ 104⅛............	1,251.30	Stocks Account	1,249.50
			Commissions	1.80
Jun. 27	20 Shares U. S. Rubber, Common @ 38½.............	773.00	Stocks Account	770.00
			Commissions	3.00
Jul. 5	25 Shares U. S. Steel, Common @ 89¼.............	2,235.00	Stocks Account	2,231.25
			Commissions	3.75
Jul. 13	2 M Amer. Smelt. and Ref. Co. 5% bonds of 1947 interest payable Apr. 1 and Oct. 1 @ 101⅜..........	2,058.83	Bonds Account	2,055.83
			Commission	3.00
Jul. 17	90 Shares Continental Can @ 45⅜	4,097.25	Stocks Account	4,083.75
			Commissions	13.50
Jul. 31	5 M King. of Belgium registered 7½% bonds of 1945, interest payable June 1 and Dec. 1 @ 100⅝....	5,101.25	Bonds Account	5,093.75
			Commissions	7.50
Aug. 24	8 M Amer. Tel. and Tel. 4% bonds of 1929, interest payable Jan. 1 and July 1 @ 86½	6,979.11	Bonds Account	6,967.11
			Commissions	12.00
1924				
Jan. 4	50 Shares Pacific Oil @ 48¼	2,420.00	Stocks Account	2,412.50
			Commissions	7.50
Jan. 5	12 Shares Canadian Pacific R. R. @ 145¼...........	1,744.80	Stocks Account	1,743.00
			Commissions	1.80
Jan. 10	10 Shares Northern Pacific R. R. Co. @ 54¾.........	549.00	Stocks Account	547.50
			Commissions	1.50
Feb. 4	10 Shares Continental Can @ 55	551.50	Stocks Account	550.00
			Commissions	1.50
Mar. 5	10 Shares Continental Can @ 49½	496.50	Stocks Account	495.00
			Commissions	1.50

JOURNAL

Feb. 15, 1924

Stocks Account	$165.00	
Profit and Loss..................................		$165.00
For stock dividends declared by Continental Can Co. in favor of stockholders of record Feb. 6 payable Feb. 15. 3 shares @ 55 (average market price on Feb. 15).		

The following were the only steps taken by the auditor and his assistant in connection with the verification of Stocks and Bonds accounts and the report thereon. Point out the

errors of both commission and omission made by these auditors, and explain what should have been their procedure instead. Also state which of the auditors' steps were correct. In the solution refer to the step numbers when possible.

Step No. 1: Counted the number of shares of stocks and the number of bonds on hand in the two safes and listed the names of the companies and the par value of the stocks and bonds, as well as the number thereof.

Step No. 2: Checked the postings to Bonds account and to Stocks account.

Step No. 3: Checked the number of shares of stocks counted against the balance of shares in Stocks account and found a discrepancy of 10 shares. These the cashier said were 10 shares of Montgomery Ward & Company stock which were pledged with a bank as collateral to a loan. The auditor noted that fact on his working sheet of count of securities.

Step No. 4: Checked the number of bonds counted against the balance called for by the Bonds account and found the total number in agreement therewith.

Step No. 5: Verified the fact (through their audit of cash receipts and disbursements) that all transactions on account of the purchase and sale of securities had been posted to these two accounts.

Step No. 6: Valued all the stocks and bonds listed on the "count of securities" sheet (except those of the *X* Company) at market and made adjusting journal entries as follows, which the senior included among his adjustments on his trial balance working sheet. He could not find even a bid or asked price for the *X* Company bond in the "Commercial and Financial Chronicle" for 10 months past, so he accepted the cost value, per the ledger account.

Profit and Loss..........................	$970	
Stocks account		$970
To write down the balance of this account to market valuation at March 31.		
Balance of account........ $7,700.25		
Market valuation 6,730.25		
Difference .... $ 970.00		
Bonds account	$86.78	
Profit and Loss.....................		$86.78
To write up the balance of this account to market valuation at March 31.		
Market valuation $9,910.00		
Balance of account........ 9,823.22		
Difference .... $ 86.78		

Step No. 7: Reported the stocks and bonds on his balance sheet of March 31, 1924, as follows:

Investments:

Stocks	$6,730.25	
Bonds	9,910.00	
Total Investments		$16,640.25

Case No. 17

Suppose that an auditor was called upon to make an audit for the first time of a manufacturing company which had been in business for fifteen years, his audit to be for the year ended April 30, 1924. Below is given certain working material. From that you are asked to outline the steps which the auditor should take to verify the balance of $5,960,850 in Real Estate, Plant and Equipment account at April 30, 1924. Reference to the checking of postings and to the verification of footings may be omitted.

Do not necessarily confine yourself to the data given, but explain what other information the auditor should have access to, or should call for, in order to complete his work on the verification of this account.

Point out any errors or irregularities which you may find in the data given and state what adjusting journal entries, if any, should be made.

Real Estate, Plant and Equipment account was the controlling account for fourteen subsidiary accounts which showed balances at April 30, 1924, and 1923, as follows:

	Balance of Asset Account April 30		*Balance of Reserve for Depreciation April 30*	
	1924	*1923*	*1924*	*1923*
Land	$ 257,600.00	$ 207,600.00		
Buildings	1,700,350.00	1,689,900.00	$ 151,899.00	$ 135,000.00
Buildings and Improvements on Leased Property	42,000.00	42,000.00	1,680.00	1,260.00
Machinery	2,773,100.00	2,732,793.00	596,856.10	396,110.62
Heat Treating Equipment	450,000.00	450,000.00	217,500.00	150,000.00
Material Handling and Storage Equipment	90,000.00	82,400.00	48,440.00	36,080.00
Power Plant Equipment	135,800.00	140,700.00	89,315.00	68,210.00
Power Transmission Equipment	290,000.00	300,000.00	255,000.00	210,000.00
Fire Prevention Equipment	31,000.00	29,000.00	8,850.00	4,500.00
Laboratory and Experimental Equipment	3,500.00	3,600.00	2,540.00	2,000.00
Permanent Tools	46,000.00	42,000.00	18,300.00	12,000.00
Perishable Tools	39,000.00	39,000.00	28,000.00	15,000.00
Office Furniture and Fixtures	86,000.00	80,000.00	4,800.00	4,000.00
Construction Work in Process	16,500.00	2,900.00	2,675.00	500.00
Total	$5,960,850.00	$5,841,893.00	$1,425,855.10	$1,034,660.62

Up to September 1, 1923, it was the practice to charge the invoice price and freight bills covering the purchase of machinery direct to machinery account. After September 1, such of these costs as were applicable to machines requiring considerable shop labor and material in their set-up were charged to Construction Work in Process. Construction Work in Process was further charged with shop labor, material, and overhead applicable to all construction work. The Process account was credited and other plant accounts debited for the cost of the shop orders closed during any month.

It was the policy of the company to carry in Perishable Tools account the value of the average stock of such tools necessary for standard production, and to charge all purchases as and when made direct to Factory Expense account.

The lease covering the property on which the company had built some additional buildings and had made some improvements in July, August, and September, 1920 (aggregating $42,000 in value) was dated January 1, 1916, and was for a period of 40 years.

Following is a transcript of Machinery account for the year ended April 30, 1924.

MACHINERY ACCOUNT

1923			*1923*		
May 1	Balance.....	$2,732,793.00	Sep. 25	J E 926......	$ 5,233.38
May 18	J E 523.....	2,431.50			
Jun. 5	J E 630.....	1,900.84			
Aug. 5	J E 822.....	806.25			
Oct. 8	J E 1040.....	36,655.63	*1924*		
Dec. 31	J E 1296.....	1,225.00	Mar. 26	J E 375......	23.65
1924			Apr. 30	Balance.....	2,773,100.00
Apr. 30	J E 399.....	2,544.81			
		$2,778,357.03			$2,778,357.03

The balance of this account was supported by detail kept on cards, a card for each machine. These data are summarized as follows:

Mach. No.	Description	Date Purchased	Invoice Price	Freight	Pulleys and Belting	Setting Up	Labor	Other Costs	Total Cost	Accumulated Depreciation
416	Bevel Gear Cutter.........	1/18/14	$ 446.60			$ 17.99	$ 3.02	$ 35.72	$ 503.33	$ 377.49
422	#13 Automatic Gear Cutter	3/19/15	616.00			8.94	2.20	14.70	641.84	433.24
450	Milling Machine	4/6/15	243.10	$ 4.40					247.50	167.06
475	Drill Press	8/3/20	52.36	3.60			2.02		57.98	13.05
483	Bevel Gear Planer.........	12/5/20	1,588.40	.75		21.10	2.75		1,613.00	362.93
496	Hack Saw	1/5/21	12.32	.25	$ 3.10		1.33		17.00	3.83
498	Turret Lathe	1/22/22	774.40	25.00		18.40	5.88		823.68	123.55
626	Chucking Machine	8/7/22	1,200.54	25.03		30.71	3.76		1,260.04	94.50
824	Bevel Pinion Lathe	2/4/23	1,627.50	14.56	26.38	3.29	3.60		1,675.33	125.65
900	Straight Tooth Bevel Gear Generator	3/6/23	1,300.00	6.72	12.73	1.54	9.77		1,330.76	99.81
	Numerous Other Machines (Detail Omitted)		2,726,683.00	7,000.00	3,200.00	10,000.00	2,500.00	15,546.54	2,764,929.54	595,054.99
	Total		$2,734,544.22	$7,080.31	$3,242.21	$10,101.97	$2,534.33	$15,596.96	$2,773,100.00	$596,856.10

Following are copies of the journal entries posted to Machinery account during the year ended April 30, 1924.

May 18, 1923.	*J E No. 523*		
Real Estate, Plant and Equipment—Machinery......		$2,431.50	
Jackson Co.			$2,431.50
For purchase of 2 Bevel Gear Planers.			
June 5, 1923.	*J E No. 630*		
Real Estate, Plant and Equipment—Machinery......		$1,900.84	
Revenue from Sale of Borings..................			$1,900.84
To correct distribution of D/M 1523, Feb., 1923, which credited Machinery account in error.			
August 5, 1923.	*J E No. 822*		
Real Estate, Plant and Equipment—Machinery......		$ 806.25	
Lowell Lathe Co...............................			$ 806.25
For purchase of 1 Turret Lathe.			
September 25, 1923.	*J E No. 926*		
Reserve for Depreciation of Machinery.............		$8,269.13	
Real Estate, Plant and Equipment—Machinery...			$5,233.38
Reserve for Depreciation of Machinery, Adjustment account			3,035.75
For amount of six grinders billed Samuels & Co. per D/M 2831/2. The above entry is to remove from Machinery account the difference between original cost of these machines and sales price as shown below.			

	- Debit -					- Credit -
Machine No.	*Depreciation Reserve*	*Depreciation Reserve Adjustment*	*Original Cost*	*Sales Price*	*Balance*	*Depreciation Reserve Adjustment*
68	$1,355.56		$1,226.75	375.00	$ 851.75	$ 503.81
69	1,503.75		1,360.87	375.00	985.87	517.88
76	1,354.69		1,225.95	375.00	850.95	503.74
39	1,347.73		1,219.67	375.00	844.67	503.06
67	1,354.32		1,225.63	375.00	850.63	503.69
80	1,353.08		1,224.51	375.00	849.51	503.57
	$8,269.13		$7,483.38	$2,250.00	$5,233.38	$3,035.75

October 8, 1923.	*J E No. 1040*		
Real Estate, Plant and Equipment—Machinery....		$36,655.63	
Construction Work in Process.................			$36,655.63
For shop orders completed during the month of September as follows:			

Project No.	Description	Cost of Machinery	—Erecting Cost— Material	Labor and Overhead	Total Cost
5	4 8″ Bevel Gear Generators	$12,675.76	$ 411.10	$ 55.40	$13,142.26
18	Installation of extra cooling capacity for quenching oil system	9,427.64	495.47	1,103.13	11,026.24
20	50 Ton Press............	1,757.34	20.26	5.00	1,782.60
21	#16 Surface Grinder......	4,997.24	55.26	63.97	5,116.47
22	Erection Steel Frame Building 24 x 140............		3,699.22	662.65	4,361.87
26	Grinder #2478	1,219.20	.05	6.94	1,226.19
		$30,077.18	$4,681.36	$1,897.09	$36,655.63

December 31, 1923.	*J E No. 1296*	
Real Estate, Plant and Equipment—Machinery......	$1,225.00	
Freight		$1,225.00
For freight paid on machinery charged in error to Freight account.		

March 26, 1924.	*J E No. 375*	
Factory Cost Adjustment—Cash Discount on Purchases	$ 23.65	
Real Estate, Plant and Equipment—Machinery...		$ 23.65
Voucher 8786 to Wilcox Mfg. Co. in amount of $2,365.00 was distributed to Machinery account. As 1%, or $23.65, was deducted when paying same, the above entry is in order to place in Machinery account the actual cost of same as $2,341.35.		

April 30, 1924.	*J E No. 399*	
Real Estate, Plant and Equipment—Machinery......	$2,544.81	
Reserve for Depreciation of Machinery, Adjustment account	1,510.32	
Reserve for Depreciation of Machinery..........		$4,055.13
To reverse portion of journal entry No. 926 wherein machines 39-67-80 had been billed on D/M 2831, Sept. 25, 1923. As it was found that these machines, though billed as above, had not been shipped until May 1, 1924, the above entry is made.		

During the year ended April 30, 1924, the company built a small addition to its factory, costing $10,450.00.

During the same year it received as a gift from the Chamber of Commerce land adjacent to its factory worth $50,000,

in consideration for an agreement not to move from the city. The journal entry recording this was follows:

Real Estate, Plant and Equipment—Land..............	$50,000	
Profit and Loss....................................		$50,000
For land donated by Chamber of Commerce, the valuation being fixed by the board of directors.		

During the year 1920 Machine No. 824 was wrecked by a very bad accident and the junk was given away for the hauling.

The following journal entry for depreciation was made at April 30, 1924, for the year ended that date:

Factory Expense—Depreciation		$395,408.48	
Reserve for Depreciation of Plant and Equipment			$395,408.48
For depreciation for the year as follows:			
Buildings 1% of $1,731,900....	$ 17,319.00		
Machinery 7½% of $2,732,793	204,959.48		
Equipment 15% of $1,005,700..	150,855.00		
Furniture and Fixtures 10% of $80,000	800.00		
Construction Work in Process 7½% of $2,900.............	2,175.00		
Permanent Tools 15% of $42,000	6,300.00		
Perishable Tools 33⅓% of $39,000	13,000.00		

There are so comparatively few transactions submitted in this case that you are asked to assume that the auditor will make a complete detailed audit of all transactions illustrated or mentioned, although it must be borne in mind that in an actual audit he would undoubtedly make only tests.

Case No. 18

The Blank Corporation was organized June 15, 1922, with a total authorized capital stock of $1,000,000, consisting of 10,000 shares of the par value of $100 each. On July 1, 1922, it purchased the net assets of Wilson & Smith, exclusive of cash, for 8430 shares.

Below are shown the accounts representing the net assets as they appeared on the books of Wilson & Smith before the sale and as they appeared on the books of the corporation immediately thereafter.

ASSETS

	—On the Books of—	
	Wilson & Smith	*The Blank Corporation*
Property	$480,000	$480,000
Good-will	15,000	20,000
Patents	2,000	2,000
Trademark	1,000	1,000
Cash	30,000	
Inventories	388,000	405,000
Customers' Accounts	12,000	10,000
Total Assets	$928,000	$918,000
LIABILITIES		
Accounts Payable	$ 25,000	$ 25,000
6% Mortgage	10,000	10,000
Reserve for Depreciation of Property	40,000	40,000
Total Liabilities	$ 75,000	$ 75,000
Net Assets	$853,000	$843,000

The firm of Wilson & Smith had never accrued or deferred expenses or income. In negotiations for the transfer of the net assets it was agreed to ignore accruals and prepayments, such amounts being considered as of no consequence.

Following is a before-closing trial balance of the Blank Corporation as at June 30, 1924:

	Debits	*Credits*
Plant	$ 650,000	
Miscellaneous Tangible Assets	6,000	
Good-will	25,000	
Patents	4,000	
Trademark	8,000	
Cash	45,000	
Inventories	189,000	
Customers' Accounts	18,000	
Leasehold	5,956	
Securities Owned	11,322	
Sales		$5,594,678
Sundry Income		780
Returns and Allowances	96,000	
Cost of Goods Sold	5,300,000	
Expense	300,000	
Accounts Payable		51,577
Mortgage Payable		10,000
Reserve for Depreciation of Machinery and Equipment		34,000
Reserve for Depreciation of Buildings		60,000
Surplus		35,643
Capital Stock		871,600
Total	$6,658,278	$6,658,278

Analyses of certain accounts appearing on the trial balance of June 30, 1924, were as follows:

PLANT ACCOUNT

Land	$ 80,000
Buildings	400,000
Machinery and Equipment	170,000
Total	$ 650,000

SURPLUS ACCOUNT

Credits:	
Net Sales, year ended June 30, 1923	$5,637,260
Revaluation of Good-will	5,000
Value of Leasehold	5,956
Total Credits	$5,648,216
Debits:	
Insurance:	
Policy #50262 dated July 1, 1922, $140,000 on buildings, 3 years' premium	$ 3,500
Policy #189723 dated July 1, 1922, on Machinery and Equipment $20,000, 1 year premium	200
Interest on Mortgage, 1 year	600
Taxes, 1 year	7,550
Rent, 9 months	1,800
Other Expenses (Including Cost of Goods Sold)	5,598,923
Total Debits	$5,612,573
Balance	$ 35,643

EXPENSE

Insurance:	
Policy #252649 dated July 1, 1923, $34,000 on Machinery and Equipment, 3 years' premium	$ 850
Interest on Mortgage	600
Taxes, 1 year	7,550
Rent, 1 year	2,400
Other Expenses	288,600
Total	$ 300,000

SUNDRY INCOME

Rentals, 8 months	$ 460
Interest on Securities owned, 6 months	320
Total	$ 780

TRADEMARK

Purchase of Trademark	$	1,000
Advertising for year ended June 30, 1923		5,000
Advertising for the year ended June 30, 1924		2,000
Total	$	8,000

PATENTS

Purchase of Patents	$	2,000
Experimental Work		2,000
Total	$	4,000

During the year ended June 30, 1923, the company decided that some improved methods which had been adopted had increased the good-will of the business, so Good-will account was written up $5,000.

On October 1, 1922, the company obtained a lease of some property for 20 years at an annual rental of $2,400. This was considered to be approximately $200 a year less than was paid by other lessees for similar property similarly located. The leasehold right was therefore set up on the books at $5,956 (the amount of an annuity of $200 for 20 years at 4%).

Given the foregoing data, explain the audit procedure in respect to the verification of each of the intangible assets shown on the trial balance of June 30, 1924, and in respect to the verification of the accrued and deferred items which are not shown thereon, assuming that this is the first time the books have ever been audited, and assuming that it was desired to establish the accounts correctly on an accrued and deferred basis.

Comment upon any errors or irregularities disclosed by the audit, or upon any other matters worthy of comment, confining the discussion, however, to the intangibles and to the accrued and deferred items.

If sufficient detail is not given in the statement of facts, state what further information the auditor would need in order to complete his work satisfactorily.

What effect, if any, would the auditor's failure to set up accrued assets and liabilities and deferred debit and credit items have on a balance sheet of the Blank Corporation at

June 30, 1924, and also upon the results of the operations of the year ended that date as revealed by the auditor's statement of income?

Case No. 19

The *X Y Z* Manufacturing Co. was organized on July 1, 1921, with an authorized capital stock of 1,100 shares of $100 each, composed of 1,000 shares of common stock and 100 shares of 7%, non-cumulative preferred.

On July 1, 1922, the company issued $20,000, 10-year 6% Sinking Fund bonds, par value $1,000 each, interest payable on January 1 and July 1. A trust agreement provided for the deposit of $864.91 on June 30 and December 31 of each year with the Blank Trust Co., trustee, for the redemption of the bonds. The trustee agreed to allow interest on the average cash on deposit for the six months ended June 30 and December 31 of each year at the rate of 3% per annum. On December 31, 1923, the trustee purchased for the sinking fund two of the company's bonds at 105 and accrued interest for the sinking fund. These bonds were immediately cancelled.

The minutes of the board of directors recorded the receipt of 50 shares of common capital stock as a donation from one of the stockholders, J. F. Williams, on February 1, 1924, and an authorization to record the stock on the books at par. The minutes also recorded the authorization of the directors to set up a value of Good-will for the company amounting to $6,000 and an increase in the value of buildings amounting to $8,000, as the result of an appraisal of the Blank Appraisal Co. on June 20, 1924. The minutes further contained a resolution of the board of directors on June 16, 1924, declaring a dividend of 7% on the preferred stock and of 6% on the common, payable on July 15 to stockholders of record on June 30.

The company's insurance at June 30, 1924, consisted of the following policies:

Company	Policy No.	Property Covered	Amount of Policy	Date of Policy	Amount of Premium
A	10260	Buildings	$ 6,640	Sep. 15, 1921	$207.50
B	9214	Contents of Buildings	4,000	Oct. 31, 1923	50.00
C	15710	Buildings and Contents	5,000	Jan. 28, 1924	62.50
D	822	" " "	14,750	Mar. 31, 1924	184.38
A	10500	Trucks (Fire and Theft)	8,000	May 31, 1924	44.20

It was the company's practice to make provision for depreciation as follows:

Property	Annual Rate	Computed
Buildings	3%	On average balances of ledger account at beginning of each month
Machinery and Equipment....	7%	On individual items
Office Furniture and Fixtures..	10%	On individual items
Trucks	20%	On individual items

Inventories at June 30, 1924, were as follows:

	At Cost	At Market
Finished Goods	$13,746.30	$10,425.10
Work in Process	1,500.00	1,400.00
Factory Supplies	2,170.40	Undetermined

The market price at June 30, 1924, of the stocks and bonds owned by the *X Y Z* Company were as follows:

Pennsylvania R. R. Stock..........................	
American Car and Foundry 7% Preferred Stock.....	123¾
American Hide and Leather, 7% Cumulative Preferred Stock	56½
Louisville and Nashville R. R. 4s, 1940.............	93½
Norfolk and Western R. R. 6s, 1931................	107¼

The dividend dates of the afore-mentioned stocks were as follows:

Pennsylvania R. R.		American Car and Foundry	
Ex-dividend Date	*Date Payable*	*Ex-dividend Date*	*Date Payable*
Feb. 1	Feb. 28	Dec. 16	Jan. 2
May 1	May 31	Mar. 15	Apr. 2
Aug. 1	Aug. 31	Jun. 15	Jul. 2
Nov. 1	Nov. 30	Sep. 16	Oct. 2

The interest payable dates of the afore-mentioned bonds were as follows:

Louisville and Nashville R. R. ....Jan. 1 and July 1
Norfolk and Western R. R. ....May 1 and Nov. 1

At June 30, 1924, there were accumulated unpaid dividends on the 7% cumulative preferred stock of the American Hide and Leather Co. amounting to 137¼%.

Assume that you had been assigned, with several assistants, to make an audit of the *X Y Z* Manufacturing Company for the six months ended June 30, 1924.

You received a confirmation from the trustee for the Sinking Fund bonds that the total bonds outstanding at June 30, 1924, amounted to $18,000 and that the sinking fund consisted at June 30, 1924, of $1,345.85 cash; no securities. You also received the following confirmation of bank balance forms:

Messrs. Blank & Blank,
Certified Public Accountants
110 Broadway, New York

Dear Sirs:

At the close of business on......*June 30, 1924,*......the balance on our books to the credit of......*X Y Z Manufacturing Company*...... was....*One Thousand Seven Hundred Twenty Two and 93/100* Dollars (*$1,722.93*......)

At the close of business on......*June 30, 1924,*......said......*X Y Z Mfg. Co.*......was obligated or indebted to us as maker, endorser, or guarantor on loans, notes, participations, or other accounts or contracts as follows:

Description of Obligation	Date	Principal	Maturity	Int. Rate	Description of Collateral or Security
None					

..*Second National Bank*........

Dated at......*Blank*............ By..*Fred Williams*............

............*July 3,*........1924. (Title)..*Assistant Cashier*......

Messrs. Blank & Blank,
Certified Public Accountants
110 Broadway, New York

Dear Sirs:

At the close of business on......*June 30, 1924,*......the balance on our books to the credit of......*X Y Z Manufacturing Company*...... was...*Four Thousand Two Hundred and Sixty Nine and 21/100* Dollars (*$4,269.21*......)

Deposit July 1, 1924, $191.93.

At the close of business on......*June 30, 1924,*......said......*X Y Z Mfg. Co.*......was obligated or indebted to us as maker, endorser, or guarantor on loans, notes, participations, or other accounts or contracts as follows:

Description of Obligation	Date	Principal	Maturity	Int. Rate	Description of Collateral or Security
Note X Y Z Mfg. Co.	*6/15/24*	*$ 500.00*	*9/15/24*	*5%*	*20 Shares Pennsylvania R.R.*
Notes Discounted					
J. Black	*12/15/23*	*1,500.00*	*9/15/24*	*6%*	
A. Jones	*5/10/24*	*930.40*	*8/10/24*	*6%*	

..*First National Bank*..........

Dated at......*Blank*............ By..*James Spencer*.............

............*July 6,*........*1924.* (Title)..*Cashier*................

The books of the *X Y Z* Company were closed every six months, on June 30, and December 31.

When notes or acceptances receivable were taken to the bank for discount, the bank computed discount at the rate of 6% per annum on the face of the note or acceptance plus interest thereon at the given rate from the date of the note or acceptance to maturity.

In the computation of interest by the bank or by the company the 360 day basis was used in every case. If the amount received from the bank was less than the face value of the note

plus interest accrued at the date of discount, the company charged the deficiency to Interest Expense.

Examples:

The amount received from the bank for Note Receivable No. 11 discounted on December 15, was arrived at as follows:

Amount of note	$1,500.00
Add 9 months' interest @ 6%	67.50
	$1,567.50
Deduct 9 months' discount on $1,567.50 @ 6%	70.54
Cash Received	$1,496.96

The entry for the foregoing was as follows:

Cash	$1,496.96	
Interest Expense	3.04	
Notes Receivable		$1,500.00

The amount received from the bank for Note Receivable No. 25, discounted February 5, 1924, was arrived at as follows:

Amount of note	$431.72
Add 3 months' interest @ 6%	6.48
	$438.20
Deduct 2 months' discount on $438.20 @ 6%	4.38
Cash Received	$433.82

The entry for the foregoing was as follows:

Cash	$433.82	
Interest Expense	.06	
Notes Receivable		$431.72
Accrued Interest Receivable (1 month)		2.16

Note Receivable #24 was collected July 1, 1924.

Transcripts of certain ledger accounts for the six months ended June 30, 1924, and a transcript of Sinking Fund account from December 31, 1922, to June 30, 1924, were as follows:

NOTES AND ACCEPTANCES RECEIVABLE

1924							
Jan. 1	Balance				*1924*		
	Acceptance #12,	A. Jones	Nov. 15, 23				
	3 mos.	6%		$ 246.32	Feb. 5	Acceptance #25	
	Acceptance #14,	B. White	Nov. 30, 23			Discounted	$ 431.72
	3 mos.	6%		430.72	15	Acceptance #12	
	Acceptance #23,	R. Foley	Dec. 5, 23			Collected	246.32
	3 mos.	6%		123.10	Mar. 5	Acceptance #23	
	Note #24,	M. Jenkins	Dec. 31, 23			Collected	123.10
	6 mos.	6%		150.72	May 10	Acceptance #28	
5	Acceptance #25,	C. Bairn	Jan. 5, 24			Discounted	930.40
	3 mos.	6%		431.72	May 31	Acceptance #27	
Mar. 31	Acceptance #26,	G. Black	Mar. 31, 24			Collected	500.00
	3 mos.	6%		827.43		Renewed	550.00
Apr. 30	Acceptance #27,	N. Thomas	Apr. 30, 24		Jun. 30	Acceptance #26	
	1 mo.	6%		1,050.00		Collected	827.43
May 10	Acceptance #28,	A. Jones	May 10, 24			Balance	1,131.44
	3 mos.	6%		930.40			
31	Acceptance #29,	N. Thomas	May 31, 24				
	3 mos.	6%		550.00			
				$4,740.41			$4,740.41
Jul. 1	Balance			$1,131.44			

SINKING FUND

1922			*1923*		
Dec. 31	Cash to Trustee	$ 864.91	Dec. 31	Bonds Payable..	$2,000.00
				Accrued Interest Payable	60.00
Jun. 30	Cash to Trustee	864.91	*1924*		
	Interest Allowed by Trustee ...	12.97	Jun. 30	Balance	1,445.85
Dec. 31	Cash to Trustee	864.91			
	Interest Allowed by Trustee ...	26.14			
1924					
Jun. 30	Cash to Trustee	864.91			
	Interest Allowed by Trustee ...	7.10			
		$3,505.85			$3,505.85
1924					
Jul. 1	Balance	$1,445.85			

PROPERTY

1924			
Jan.	1	Balance	
		Buildings	$20,643.90
		Machinery and Equipment	18,200.50
		Furniture and Fixtures	3,050.75
		Trucks	8,000.00
Jan.	8	Milling Machine	275.00
Feb.	29	Planer	1,800.00
Mar.	20	3 Desks and Chairs	210.00
Apr.	1	5 Bookkeeping Machines	6,000.00
Apr.	30	Addition to office building completed Apr. 30 (transferred from Construction account)	5,299.63
Jun.	18	Lathe	853.25
Jun.	30	Increase in valuation of buildings per appraisal of Blank & Co. June 15, 1924	8,000.00
			$72,333.03
1924			
Jul.	1	Balance	$69,558.03

1924			
Feb.	25	Cash from Sale of Gear Generator	$ 200.00
		Balance of cost of above written off to Reserve	1,100.00
Apr.	1	Trade value of 3 old Billing Machines traded in when Bookkeeping Machines were purchased	300.00
		Balance of cost of above written off to Reserve	900.00
Jun.	30	Cost of Milling Machine purchased Jan. 8, installed Jan. 12, wrecked in accident Jan. 15	275.00
Jun.	30	Balance	69,558.03
			$72,333.03

SECURITIES OWNED ACCOUNT

1924				*1924*			
Jan.	1	Balance		Feb.	7	50 Shares American Car and Foundry 7% Pfd	$ 6,190.50
		10 Shares, Pennsylvania R.R.	$ 411.50	May	9	4 M Norfolk and Western R.R. Gen'l Gold 6s, 1931	4,264.00
		25 Shares, American Car and Foundry, 7% Pfd	2,928.75	Jun.	30	Balance	$15,415.05
		2 M Norfolk and Western R.R. Gen'l Gold 6s, 1931	2,123.00				
	4	40 Shares, American Car and Foundry, 7% Pfd	4,846.00				
	11	5 M Louisville and Nashville R.R. Unified Gold 4s, 1940	4,532.50				
	24	10 Shares American Hide and Leather 7% Cumulative Pfd	571.50				
	25	3 M Norfolk and Western R.R. Gen'l Gold 6s, 1931	3,199.50				
Feb.	21	2 M Norfolk and Western R.R. Gen'l Gold 6s, 1931	2,113.00				
Mar.	11	12 Shares American Hide and Leather 7% Cumulative Pfd	649.80				
Apr.	17	15 Shares American Car and Foundry 7% Pfd	1,832.25				
		1 M Norfolk and Western R.R. Gen'l Gold 6s, 1931	1,071.50				
May	3	5 Shares American Hide and Leather 7% Cumulative Pfd	265.75				
	7	30 Shares Pennsylvania R.R.	1,324.50				
			$25,869.55				$25,869.55
Jul.	1	Balance	15,415.05				

NOTES AND ACCEPTANCES PAYABLE

Date		Item	Amount	Date		Item	Amount
1924				*1924*			
Mar.	15	Acceptance #84 paid	$ 244.65	Jan.	1	Balance	
Apr.	30	Note #86 paid	1,000.00			Note #83, First National Bank, Nov. 30, 23, 6 mos., 5%	$1,500.00
May	2	Acceptance #85 paid	573.60			Acceptance #84, F. Chase, Dec. 15, 23, 3 mos., 6%	244.65
May	31	Note #83 paid	1,500.00		2	Acceptance #85, G. Brown, Jan. 2, 24, 4 mos., 6%	573.60
Jun.	30	Balance	1,003.72		31	Note #86, First National Bank, Jan. 31, 24, 3 mos., 5%	1,000.00
				May	15	Acceptance #87, R. Smith, May 15, 24, 3 mos., 6%	503.72
				Jun.	15	Note #88, First National Bank, Jun. 15, 24, 3 mos., 5%	500.00
			$4,321.97				$4,321.97
				1924			
				Jul.	1	Balance	$1,003.72

RESERVE FOR DEPRECIATION

1924			*1924*				
Feb. 25	Gear Generator	$ 1,100.00	Jan. 1	Balance		$18,121.65
	Adjustment of Reserve on above	118.22	Apr. 1	Adjustment of Reserve on 3 Old Billing Machines		100.00
Apr. 1	3 Old Billing Machines	900.00				
Jun. 30	Balance	17,578.72	Jun. 30	Depreciation		
				Machinery	$700.76	
				Buildings	336.16	
				Furniture and Fixtures	278.37	
				Trucks	160.00	1,475.29
		$19,696.94				$19,696.94
			1924			
			Jul. 1	Balance		$17,578.72

INTEREST EXPENSE

1924		
Jan. 31	Accrued Interest Payable	$101.37
Feb. 29	Accrued Interest Payable	104.14
	Cash Receipts	.06
Mar. 31	Accrued Interest Payable	103.17
Apr. 30	Accrued Interest Payable	103.16
May 31	Accrued Interest Payable	97.70
	Cash Receipts	.21
Jun. 30	Accrued Interest Payable	93.56
		$603.37

INTEREST EARNED

1924		
Jan. 31	Accrued Interest Receivable	$ 29.60
Feb. 29	Accrued Interest Receivable	49.16
Mar. 31	Accrued Interest Receivable	52.52
Apr. 30	Accrued Interest Receivable	58.72
May 31	Accrued Interest Receivable	52.82
Jun. 30	Accrued Interest Receivable	44.32
		$287.14

MISCELLANEOUS EXPENSE

1924		
Jan. 5	Directors' Fees	$ 100.00
7	Stamps	25.00
9	Trade Journal—One Year's Subscription	5.00
15	Miscellaneous Office Supplies	12.35
	Western Union	60.00
	New York Telephone Co.	15.00
	New York Telephone Co. out-of-town calls	.25
30	Stamps	30.00
31	Legal Expense	275.00
Feb. 8	Traveling Expense Report of President	87.26
15	Chamber of Commerce dues of President	25.00
16	Stamps	15.00
21	Salesmen's Traveling Expenses	374.67
23	Western Union	45.25
	Cleaning Office	15.41
	Supper Money	3.00
25	New York Telephone Co.	15.00
26	Postal Telegraph Co.	20.05
27	Stamps	40.00
29	Business Magazine—one year's subscription	8.00
Mar. 4	Gift to St. Vincent's Hospital	2,000.00
8	Stamps	25.00
12	Office Supplies	4.71
13	New York Telephone Co.	15.00
	New York Telephone Co. out-of-town calls	40.00
15	Stamps	25.00
17	Stamps	25.00
18	Western Union	35.10

1924			
Apr.	5	Directors' Fees	100.00
	7	Stamps	10.00
	8	Membership Dues	35.00
	12	Various Cables re Selling Campaign	300.00
	15	Postal Telegraph Co.	50.00
	19	Legal Fees	571.00
	22	Supper Money	4.50
		Miscellaneous Office Supplies	4.72
	29	Stamps	60.00
May	3	Stamps	18.00
	10	Management and Administration — two years' subscription	7.50
	13	New York Telephone Co.	30.00
		New York Telephone Co., out-of-town calls	15.75
	15	Journal of Accountancy—one year's subscription	4.00
		Trade Newspaper—one year's subscription	3.50
	24	Cleaning Office	6.00
		Miscellaneous Office Supplies	.23
	26	Salesmen's Traveling Expenses	40.70
		Prentice-Hall Tax Service	65.00
	27	Stamps	90.00
	28	Western Union	26.37
Jun.	2	Trade Association Dues	25.00
	3	Stamps	10.00
	16	Salesmen's Traveling Expenses	25.35
	18	Western Union	60.31
	19	Stamps	50.00
	21	Supper Money	3.00
		Cleaning Office	5.00
		Miscellaneous Office Supplies	.21
	25	Postal Telegraph	35.04
			$4,997.23

INSURANCE ACCOUNT

1924			
Jan.	28	Premium, Policy 15710	$ 62.50
Mar.	31	Premium, Policy 822	184.38
May	31	Premium, Policy 10500	44.20
			$291.08

COST OF SALES

Date	Item		Amount	Date	Item		Amount
1924				*1924*			
Jan. 1	Inventories, Dec. 31, 1923:			Jun. 30	Inventories, June 10, 1924:		
	Finished Goods	$10,123.25			Finished Goods	$13,746.30	
	Work in Process.......	2,500.00			Work in Process.......	1,500.00	
	Supplies	3,571.90	$16,195.15		Supplies	2,170.40	$17,416.70
	Net Purchases, Direct Labor and Manufacturing Expense for the six months ended June 30, 1924........		295,076.54				
	$293,854.99		*$311,271.69*				

PROFIT AND LOSS

Date	Item	Amount	Date	Item	Amount
1924			*1924*		
Jan. 5	Settlement of claim for injuries to pedestrian hit by company's truck on May 6, 1923	$2,500.00	Mar. 15	Writing off credit balances of Accounts Payable over one year old..........	$ 210.00
Jun. 18	Settlement of claim for injuries to employee in accident of Mar. 25, 1924...	1,500.00	May 23	Proceeds from Sale of 20 shares Donated Common Capital Stock........	1,600.00
Jun. 30	Cost of milling machine wrecked shortly after installation on Jan. 12..........	275.00	Jun. 30	Reappraisal of Buildings.............	8,000.00
		$4,275.00	30	Unclaimed wages, June, 1924.........	500.00
				$6,035.00	*$10,310.00*

SURPLUS

1924			*1924*	
Jan. 5	Correction of error in payment of monthly salary of head bookkeeper, month of December, 1923, his increase in salary having been overlooked....	$ 50.00	Jan. 1	
Jan. 31	Extra compensation awarded to factory superintendent for exceptionally good production record, year ended Dec. 31, 1923	3,000.00	Mar. 31	
Feb. 28	Income Tax—additional assessment applicable to year ended Dec. 31, 1922..	910.60		
Mar. 31	Additional commissions paid to John Doe, salesman, applicable to Dec. 1923 business (to correct error in computations)	10.00		
		$3,970.60		

Trial balances of the general ledger at December 31, 1923 (after closing) and at June 30, 1924 (before closing), were as follows:

	—Dec. 31, 1923—		—June 30, 1924—	
	Debit	*Credit*	*Debit*	*Credit*
Petty Cash	$ 250.00		$ 300.00	
Cash	2,275.26		5,788.08	
Notes and Acceptances Receivable	950.86		1,131.44	
Accounts Receivable	40,266.84		60,772.15	
Dividends Receivable	43.75		52.50	
Accrued Interest Receivable	24.51		147.27	
Inventory—Finished Goods	10,123.25		13,746.30	
Inventory—Work in Process	2,500.00		1,500.00	
Inventory—Factory Supplies	3,571.90		2,170.40	
Sinking Fund	573.84		1,445.85	
Securities Owned	5,463.25		15,415.05	
Property	49,895.15		69,558.03	
Organization Expense	1,500.00		1,500.00	
Good Will			6,000.00	
Taxes Paid in Advance	425.00		425.00	
Interest Paid in Advance	31.25		5.21	
Notes and Acceptances Payable		$ 1,744.65		$ 1,003.72
Accounts Payable		19,521.18		25,000.00
Accrued Interest Payable		540.61		543.78
10 Year 6% Sinking Fund Bonds		18,000.00		18,000.00
Rental Received in Advance		130.00		130.00
Reserve for Depreciation		18,121.65		17,578.72
Reserve for Uncollectible Accounts		6,225.72		9,270.91
Common Capital Stock		10,000.00		10,000.00
7% Preferred Capital Stock		10,000.00		10,000.00
Profit and Loss				6,035.00
Surplus		33,611.05		35,640.45
Sales				400,014.55
Interest Earned				287.14
Dividends Income				93.75
Income on Sinking Fund				7.10
Cash Discount on Purchases				3,572.87
Returns and Allowances			580.00	
Cost of Sales			293,854.99	
Salaries of Executives			25,000.00	
Salesmen's Salaries			2,300.00	
Salesmen's Commissions			6,028.95	
Cash Discounts on Sales			3,718.70	
Office Salaries			11,124.71	
Uncollectible Accounts			3,045.19	
Salesmen's Traveling Expenses			1,490.84	

	—Dec. 31, 1923—		—June 30, 1924—	
	Debit	*Credit*	*Debit*	*Credit*
Advertising			$ 345.97	
Depreciation			1,475.29	
Stationery			1,541.45	
Printing			822.94	
Insurance			291.08	
Miscellaneous Expense			4,997.23	
Interest Expense			603.37	
	$117,894.86	$117,894.86	$537,177.99	$537,177.99

The undeposited receipts of June 30, 1924, counted by one of your assistants at 9 o'clock on July 1, amounted to $191.93.

Given the foregoing data, submit:

(A) A working trial balance sheet showing the ledger account balances before adjustment, adjustments, balances after adjustment, and references to the working papers mentioned in C.

(B) An audit program.

(C) Auditor's working papers (besides the trial balance mentioned in A) in support of the following accounts:

(1) Petty Cash.
(2) Cash.
(3) Accounts Receivable.
(4) Accrued Interest Receivable and Payable.
(5) Interest Paid in Advance.
(6) Interest Earned and Interest Expense.
(7) Notes and Acceptances Receivable.
(8) Securities Owned.
(9) Property.
(10) Notes and Acceptances Payable.
(11) Common Capital Stock.
(12) Preferred Capital Stock.
(13) Profit and Loss account—direct charges and credits.
(14) Surplus account—direct charges and credits.
(15) Dividends Income.
(16) Miscellaneous Expense.
(17) Any other working papers which you think should be prepared.

(D) A report on the audit including:
(1) Letter to client and comments on the audit.
(2) Certificate.
(3) Balance Sheet, June 30, 1924.
(4) Statement of Income and Profit and Loss for the six months ended June 30, 1924, setting forth clearly the total cost of manufacture, total selling and total general expenses.
(5) Schedules of Securities Owned and Notes and Acceptances Payable.

In connection with accounts of which transcripts are not given, any detail may be assumed.

QUESTIONS ON AUDITING

Question 1.—What is the main distinction between the qualifications and duties of an accountant and those of an auditor?

Question 2.—If you were called upon to make an audit of the books and records of a large university, state in a general way what you would be expected to accomplish.

Question 3.—Name six different interests (individuals or business organizations) that might desire a professional auditor to make an audit of a large manufacturing company paying royalties on a patented article, and state in what phases of the audit each would be particularly interested.

Question 4.—Explain four different forms of "internal check" which a business organization might well adopt to safeguard against defalcations.

Question 5.—By what should an auditor be guided in determining the extent to which he should go in an endeavor to detect fraud?

Question 6.—Explain briefly, but clearly, the distinction between a balance sheet audit and a complete audit. Would an auditor making a balance sheet audit as of December 31. be expected to uncover a defalcation if it occurred on December 1 previous, assuming that the cashier had misappropriated cash receipts from the sale of Liberty bonds?

Question 7.—State at least five things that should be definitely understood between the auditor and his client concerning the scope of the work to be done in an audit and explain why these things should be understood.

Question 8.—It is better for the public accountant if his work, instead of coming largely at the end of the year, is fairly evenly distributed throughout the year, but are there any other reasons why you as an auditor would recommend

that some of your clients adopt a fiscal year ending on the last day of a month other than December? If so, give and explain your reasons.

Question 9.—Explain why an auditor should not be content with merely taking off a trial balance of customers' accounts, but should also examine the Sales account or accounts to help him determine the asset value of customers' accounts.

Question 10.—Explain why an auditor in making a balance sheet audit should examine maintenance accounts in order to establish the value of corresponding property assets (unless appraised values of property are to be used).

Question 11.—Explain why an auditor in making a balance sheet audit should examine income and expense accounts to help him to establish the value of certain assets and the amount of certain liabilities. Name the assets and liabilities you have in mind.

Question 12.—Explain what is meant by preliminary audit work and mention some of the things usually done in the preliminary work.

Question 13.—Describe briefly an audit program. Of what value is the audit program at the beginning of the audit, during the audit, and after the audit has been completed?

Question 14.—If, as the result of his work, the auditor finds that a number of adjusting entries affecting the balance of Surplus account should be made to correct errors in principle and other errors which he discovered, and if it is necessary for him to render his report before the adjustments can be spread upon the books, what should he do:

(1) If the client agrees to all of the adjustments?
(2) If the client disagrees with some of the adjustments?

Question 15.—If an auditor was asked to make an audit of a mercantile business for the six months ended December 31, and if he was able to begin work promptly on the morning of January 1, what should he ordinarily do first, and why? If he was not able to begin work until some time later, say January 20, what should he ordinarily do first, and why?

Question 16.—Illustrate working papers showing two different ways in which an auditor may advantageously take off a before-closing trial balance of the general ledger, providing for the balances before adjustments, for the adjustments, and the balances after adjustments, assuming that he is about to make an audit of the accounts for the year ended December 31, of a concern that has been in business for a number of years. Fill in the working papers with the following balances:

Cash	$ 4,000
Sales	90,645
Sundry Liabilities	15,000
Notes Receivable	1,800
Capital Stock	20,000
Surplus	2,000
Office Salaries	5,260
Other Expenses	10,000
Notes Payable	2,000
Customers' Accounts	15,625
Land	6,000
Accounts Payable	3,500
Interest Earned	150
Other Earnings	340
Cost of Goods Sold	38,000
Securities Owned	1,960
Buildings	35,000
Returns and Allowances	240
Accrued Payroll	250
Sundry Assets	16,000

The assets and liabilities as of the previous December 31 were as follows:

Cash	$ 3,000
Miscellaneous Liabilities	28,100
Capital Stock	20,000
Customers' Accounts	14,000
Surplus	2,000
Notes Receivable	1,000
Securities Owned	3,250
Notes Payable	3,000
Miscellaneous Assets	13,000
Accounts Payable	2,000
Accrued Payroll	150
Buildings	15,000
Land	6,000

Give effect in the trial balance working sheets to the following facts which the audit of the books revealed:

(1) Certain stock purchased for $120 was sold and the net proceeds thereof, amounting to $160, were credited to Securities Owned account.

(2) Overcharges on customers' invoices amounting to $255 were credited to Customers' Controlling account and charged to Sales account.

(3) Advances on account of office payroll applicable to the period beyond December 31 (amounting to $260) were charged to Accrued Payroll account. In accruing the office payroll at December 31, the bookkeeper made an error and understated the amount by $100.

Question 17.—Suppose that when you started an audit, the books had already been formally closed, but that you wished to take off a before-closing trial balance. State a practical way to proceed with assurance that your trial balance would balance the first time and that you would therefore not spend time looking for differences.

Question 18.—Explain why it is important for the auditor to examine, early in the audit, the by-laws of a company and the minutes of meetings of stockholders, directors and special committees.

Question 19.—Why should an auditor inspect the certificate of incorporation of an incorporated company?

Question 20.—Why should an auditor, when auditing a partnership for the first time, inspect the partnership agreement?

Question 21.—Explain the difference between the "checking" and the "analysis" method of auditing. Also explain why it is not desirable for an auditor to use either of these two methods exclusively.

Question 22.—On what grounds is an auditor justified in not verifying all of the entries for a given accounting period, and, notwithstanding that fact, in stating that in his opinion the financial statements included in his report correctly reflect the condition of the business as of a given date or the results of its operations for a given period?

Question 23.—State some practical rules in regard to the proportion of entries to be tested in an audit when not all entries are verified.

Question 24.—Give five practical rules in regard to the verification of footings.

Question 25.—Explain briefly the two distinct processes of checking postings.

Question 26.—An export commission merchant usually requires his merchandise creditors to render their invoices in triplicate or quadruplicate so that the extra copies may be used conveniently in connection with the preparation of consular and commercial invoices. Sometimes it is necessary to send the duplicate invoice (in lieu of the original) to the accounting department for payment, in order to save the discount, if the original has been misplaced or has been used for some other purpose. In other words, the mere fact that bills marked "duplicate" are entered in the voucher register and paid does not mean that duplicate payments have been made, and yet that possibility always exists.

If, in auditing the books of an export commission merchant, an auditor found, when checking the vouchers, a number of bills marked "duplicate," state what steps he should take to satisfy himself that the originals had not also been vouchered:

(1) If a voucher register index was kept.

(2) If a voucher register index was not kept.

It is assumed that there is no accounts payable ledger, the detail of Vouchers Payable account being the open items in the voucher register.

Question 27.—If you were a junior auditor on an audit and were told by your senior to "completely check the vouchers for the months of November and December," outline your procedure from beginning to end, assuming that the company had adopted the voucher system. Give reasons for each step taken.

Question 28.—Upon what would the probability of a falsification of accounting records depend?

Question 29.—If you were a junior auditor and were told by your senior to "completely audit the check record for the period of the audit," outline your procedure from beginning to end, assuming that the company maintained a voucher register in which all items were entered before being paid. It will be assumed that the vouchers paid by the checks recorded

in the check record had been properly audited before you began your work of auditing the check record. The blank checks were numbered in sequence with printed numbers.

Give reasons for each step taken.

Question 30.—Assuming that purchase, sales, and expense bills are recorded in special journals, and that the general journal contains practically nothing but corrections of errors and closing entries, what entries in the general journal should be most carefully checked by the auditor, and why?

Question 31.—Referring to the following trial balance give your idea (without going into a detailed explanation in respect to each account) of what is meant by auditing from the trial balance, assuming a complete audit.

	Debits	*Credits*
Cash	$ 5,000	
Notes Receivable	2,000	
Merchandise Inventory	8,000	
Securities	1,000	
Real Estate	15,000	
Other Assets	8,000	
Accounts Payable		$ 6,000
Other Liabilities		15,000
Sales		112,000
Interest Earned		60
Merchandise Purchases	100,000	
Cost of Goods Sold..............	0	0
Administrative Expense	12,000	
John Jones—Partner		8,000
Wm. Smith—Partner		9,940
	$151,000	$151,000

Question 32.—Referring to case 10, what amount should be reported on a balance sheet at December 31 as cash on hand and in banks? Give reason for selecting the amount which you choose.

Question 33.—Suppose you were called upon for the first time to make an audit of a company that had been in business for twenty-five years, the audit to cover the period of a year ended December 31. Where would your starting point be in reconciling the bank accounts at December 31, if you started the work on January 15? Assume that time did not permit you to check all of the paid checks against even the current year's disbursements. Give reasons for your answer.

How could you be sure that you had included *all* of the old outstanding checks unless you checked the returned checks against the cash book from the beginning of the business?

Question 34.—State five practical rules about verifying cash on hand at any given date.

Question 35.—Given the same data and facts as were given in case 11, in what respects would the auditing procedure differ, if the auditor commenced his work on the following February 8?

Question 36.—Distinguish briefly between a positive and a negative confirmation of an account receivable. Under what circumstances would an auditor use the one form? Under what circumstances would he use the other?

Question 37.—Under what circumstances would it be inadvisable to send requests to debtors to confirm, in either a positive or a negative way, the amount of their indebtedness? Under what circumstances is it advisable?

Question 38.—In the study of accounting the student is taught the great value of controlling accounts to the bookkeeper in keeping his books in balance and also to the accountant in making up financial reports. Explain why they are likewise a great boon to the auditor.

Question 39.—How may the auditor assure himself in a general way of the adequacy of the reserve for uncollectible accounts without a detailed analysis of customers' accounts to ascertain the age of the charges appearing therein?

Question 40.—Assume that an auditor was engaged to make an audit of a company for the month of July. He found that the customers' ledger at July 31 was out of balance with the control, the control being $892.73 more than the sum of the balances of the subsidiary ledger. Assume that the auditor had proved the footings from July 1 and the abstraction of balances at July 31 of all of the individual accounts. Should he then proceed immediately to check the postings, assuming that the client told him to "go ahead and find the difference," or what should he do?

Question 41.—State in outline form the principal points about inventories and their verification which are discussed

in Chapter X. Give main headings to the main ideas, and subheadings to subordinate ideas related to the main points.

Question 42.—Suppose that a manufacturing concern maintained a stores ledger for all its raw material and had a system of recording on a tag attached to the bins in which the material was kept, items put into the bins when received and items withdrawn therefrom, per the requisitions on the storekeeper. Would an auditor be justified in accepting (as to quantities) a book inventory of materials, if he compared the balances per the bin tickets and found them in agreement with the balances per the stores ledger accounts?

Question 43.—Assume that an inventory had been taken promptly at November 30 when it was normally very low and could be taken quickly. Assume further that there was every reason to believe that this inventory had been accurately taken. At December 31 the inventory was very large owing to heavy purchases in December. Explain the steps that an auditor might justifiably take to verify the inventory at December 31 without counting the many items.

Question 44.—Given the following inventory of a retail shop for children's, clothing, toys, etc. (correct as to quantities and valuation), state the amount which should be shown as merchandise inventory on a balance sheet, adopting the rule of valuing inventory at cost or market, whichever is lower.

		Value Per Unit		Total Value	
	Items	*Cost*	*Market*	*Cost*	*Market*
25	Toilet baskets	$ 2.20	$ 2.25	$ 55.00	$ 56.25
150	Knit towels	.38	.35	57.00	52.50
16	Crepe de chine carriage sets	10.00	12.50	160.00	200.00
125	Lingerie and pongee hats...	2.00	1.75	250.00	218.75
85	Rubber bibs with sleeves...	.50	.50	42.50	42.50
240	Creepers	2.05	1.98	492.00	475.20
200	Spring coats	9.50	10.00	1,900.00	2,000.00
50	Spring coats	17.50	18.50	875.00	925.00
8	Play yards	6.00	5.75	48.00	46.00
8	Office desks	55.00	60.00	440.00	480.00
140	Shirts	.75	.79	105.00	110.60
200	Boys' wash suits...........	6.20	5.98	1,240.00	1,196.00
125	Bloomers	1.85	1.80	231.25	225.00
5	Cribs	21.00	19.98	105.00	99.90
12	Electric trains	1.50	1.50	18.00	18.00
	Total			$6,018.75	$6,145.70

Question 45.—Referring to case No. 14, assume that Mr. R. A. Black, a senior auditor, and Mr. F. O. Brown, a junior auditor, were to have general charge of taking the inventory, beginning on December 23, 1923. For this purpose they were to have all the assistance needed from foremen and other employees familiar with all of the items to be inventoried, and from clerks familiar with the cost records.

Write a set of instructions for taking the inventory, such as Mr. Black might prepare, Mr. Black having been vested with full authority over the company's employees, as though he were the general manager.

Question 46.—Referring to case No. 14, in what respects would the auditor's procedure have differed, if the inventory sheets had been prepared from the book records, instead of from actual count?

Question 47.—Why are notes given in payment of stock subscriptions considered as questionable current assets, and therefore usually set up separately in a balance sheet by an auditor?

Question 48.—What attention, if any, should the auditor pay to the following transcript of a creditor's account, assuming that the subsidiary ledger is in agreement with the controlling account, and that the entries in the controlling account have been found to be proper.

JOHN DOE

1924			*1924*		
Jan. 18	Cash..............	$800	Jan. 8	Purchases.........	$800
Apr. 5	Cash..............	900	Mar. 22	Purchases.........	900
Apr. 30	Cash..............	500	May 31	Purchases.........	700
Jun. 12	Cash..............	700			

Question 49.—Given the following securities of a bond house, state at what amount they should be valued for balance sheet purposes as of December 31 (disregarding amortization):

	Purchase Price	*Interest Accrued at December 31*	*Market Price*
Bonds of Company *A*............	$ 3,562	$ 45	$2,000
Bonds of Company *B*............	5,100	125	3,500
Bonds of Company *C*............	2,760	24	1,000
	$11,422	$194	$6,500

Question 50.—Referring to the previous question, suppose these bonds were owned by a mercantile house, how should they be valued for balance sheet purposes?

Question 51.—A holding company owns 800 shares of a subsidiary whose balance sheet at May 31 (which may be accepted as correct) showed the following:

Assets		Liabilities	
Due from Holding Co.....	$ 4,000	Liabilities	$ 1,000
Other Assets	58,000	Capital Stock 1000 shares (par value $50 each)...	50,000
		Surplus	11,000
Total	$62,000	Total	$62,000

The surplus of the subsidiary company at the date of acquisition of the 800 shares by the holding company was $2,000. These 800 shares were purchased on the stock exchange for $58 each (total cost). How should the 800 shares be valued and also classified on a balance sheet of the holding company as of May 31? If the valuation taken is above or below cost, what entries should be made on the books of the holding company? How should the 800 shares be valued and classified, if a consolidated balance sheet is prepared?

Question 52.—The *A* Company on February 19, 1918, took out an insurance policy on the life of its president (aged 34) for $10,000 on the whole life plan. The annual premiums amounted to $255.80, all of which were charged (less dividends) to Premiums account. No other entries on account of this insurance were made.

The dividends and cash surrender values (per $1,000 of insurance) were as follows:

Feb. 19	*Amount of Dividend*	*Cash Surrender Value*
1919.....................	$46.80	$ 2.35
1920.....................	48.20	20.08
1921.....................	49.60	38.16
1922.....................	51.10	51.62
1923.....................	52.70	65.46
1924.....................	59.10	79.67

On May 31, 1924, Premiums account showed a debit balance of $1,483.10.

On March 28, 1922, the company took out a loan on this policy for $381.00 at 6% interest, which was still unpaid at May 31, 1924. The interest was payable the first year in advance, thereafter at the end of the year.

The company in taking out the insurance felt that if the president died they would lose during the period of adjustment $10,000. Assuming that this loss would be actual, criticize the action of the company and the bookkeeping entries, if you were called upon to make an audit of the books of the *A* Company for the year ended May 31, 1924.

Question 53.—Referring to question 52, outline the entries which would be made for the first three years if part of the premiums were charged to Expense account and part to an asset account, no other entries being made. State the advantage of the entries which you submit. State what objections (if any) can be raised against these entries, and give reasons.

Question 54.—Name at least five principal things which should be done by an auditor in verifying the balance of Mortgages Receivable account.

Question 55.—What matters are of principal concern to an auditor in the verification of sinking fund accounts?

Question 56.—Of what use is a deed to an auditor in the verification of real estate account? Why cannot an auditor rely entirely upon the deed?

Question 57.—A company erected a building on property leased for a long term. The work was completed at July 1, 1912, at a cost of $20,000. Depreciation was computed yearly at the rate of 2% (which rate it may be assumed is generally used by engineers for that class of building). On July 1, 1924, it was sold for its appraised sound value. The cost of constructing an identical building at that date was $25,000. At what price was it sold? Explain how you arrived at your answer.

Question 58.—A company purchased real estate on December 31, 1910, for $50,000, consisting of land valued at $15,000 and buildings valued at $35,000. An auditor was

called in to make an audit for the year ended December 31, 1923. He found that the company had never provided for depreciation on the buildings, taking the position that the land, owing to an ever increasing demand, had appreciated in value faster than the buildings had depreciated.

The company also pointed to large expenditures for maintenance, contending that the buildings had been kept in a most excellent state of repair and that therefore expenses should not be further charged with depreciation.

Construction costs had considerably increased since 1910, and it may be assumed that the cost to replace the company's building at December 31, 1923, would be $50,000. This was a further argument used by the company against a depreciation reserve.

What position should the auditor take in reporting the value of the real estate in his balance sheet of December 31, 1923?

Question 59.—Should a reserve for depreciation of land ever be set up? If so, when?

Question 60.—A partnership on May 31, 1924, sold its net assets of $160,000, including an item of Good-will amounting to $3,000, to a corporation in consideration of 1,650 shares of capital stock of the par value of $100 each. The entry on the books of the corporation to record this transaction was as follows:

May 31, 1924.		
Sundry Assets	$165,000	
Capital Stock		$165,000
For purchase of sundry assets of Blank & Blank for 1650 shares of common stock.		

On June 30 when an auditor was called in to make an audit of the company's books for the six months ended that date, he found the ledger account "Sundry Assets" unchanged with a debit balance of $165,000. Would he be justified in reporting "Sundry Net Assets $165,000" on his balance sheet of June 30? If not, what should he do about it?

Question 61.—The Ardsdale Manufacturing Company purchased on March 1, 1923, as a site for a factory, a certain

parcel of land on which some old tenement buildings were standing, at a total cost of $25,000. On the seller's books the land was carried at $10,000 and the buildings at $8,000.

It cost the Ardsdale Company $1,500 to remove the dwelling houses to make room for the factory. Two hundred dollars was secured from the sale of the old building material.

It took two months to build the factory. Operations were begun on May 1.

The construction work was done under contract for $40,000, one-half of which was paid to the contractor at the end of the first month and the balance at the end of the second month. The company was obliged to borrow $10,000 of the second payment to the contractor at 6%.

The real estate, after the factory had been completed, was assessed at $48,000, composed as follows:

Land	$16,000
Building	32,000
	$48,000

On this the company paid taxes from March 1, 1923, at the rate of 2½%.

Insurance for $10,000 on the construction work was taken out on March 15, 1923. This was increased on April 15 to $28,000. The insurance premium paid was at the rate of $2.50 for every $100 of insurance for a period of three years.

Legal fees covering the search of title to the property, drawing of contracts and so forth, amounted to $500.

At what amount would the Ardsdale Company be justified in carrying the value of the land and factory on their books? Show how you arrived at the amount.

Question 62.—On July 1, 1923, *A* bought real estate for $50,000 from *B*, giving him a purchase-money mortgage for $42,000 at 6%, interest payable semi-annually. The *X* Company purchased this real estate on June 1, 1924, subject to the mortgage, for $55,000, plus accrued interest on the mortgage. There was no agreement in the deed that the *X* Company would pay the mortgage when due. The purchase was recorded on the books of the *X* Company as follows:

Land	$15,000	
Buildings	40,000	
Mortgage Payable		$42,000
A		13,000
For real estate purchased from *A* subject to a mortgage of $42,000. For valuation of land and buildings see resolution of the board of directors June 5, 1924.		

Was this a proper entry setting up Land and Buildings accounts? If not, state what the entry should have been. Six months later the company became bankrupt and *B* immediately foreclosed the mortgage. A sale of the property brought $39,000. How much was *B* entitled to receive, assuming that the *X* Company had never paid interest on the mortgage?

Question 63.—Name six different items of expense which, under certain circumstances, may be capitalized, and state the circumstances.

Question 64.—In analyzing Buildings account, an auditor found that $15,000 had been charged to this account in one month for "betterments." What should he do to satisfy himself that these items were properly capitalized?

Question 65.—Referring to the previous question, suppose that the auditor found that the so-called "betterments" were actually for replacements. What adjusting journal entry should he make, assuming that proper reserve for depreciation accounts had been kept?

Question 66.—Suppose that a manufacturing concern does its own construction work and also its own repairing of buildings and machinery. What would the auditor's procedure be to determine whether or not repair items had been erroneously charged to asset accounts?

Question 67.—Suppose that an auditor finds that large amounts have been spent for bona fide construction work, and that all of these amounts are supported by approved vouchers. What further investigations, if any, should he make, and why?

Question 68.—In reading the minutes of the board of directors, an auditor making a balance sheet audit as of June

30, 1924, found a reference to a contract with the Brookside Construction Co. for the construction of an additional building for $80,000, to be completed before August 31, 1924. The auditor also found that $60,000 had already been paid to the contractor and that the building was about four-fifths completed. On the strength of these facts alone, would the auditor be justified in reporting the value of the building in his balance sheet as $80,000 among the assets, offset by $20,000 among the current liabilities? If not, what more should he do, and how should he report the value of the building and the unpaid balance on the contract?

Question 69.—State a good reason (or reasons) why it is sometimes desirable to increase the book values of property accounts when the increase does not represent additional expenditures but rather increased valuation as the result of economic changes. State what account or accounts should be credited with the increase.

Question 70.—How should the auditor protect himself when he finds that property accounts have been written up?

Question 71.—A company is organized to purchase and to mine coal, the idea being to purchase a new mine as soon as an old one has become exhausted. An auditor, engaged in reporting the results of the first mining venture, finds that no reserve has been set up for depletion. Should he or should he not insist that a reserve be created? Give reasons for your answer.

Question 72.—What principal factors are taken into consideration in determining the amount to charge the lessee as royalty for coal mined under a lease of the property, disregarding any question of interest on capital invested?

Question 73.—Referring to the previous question, suppose that the mine was operated by the owner, and that he wished to set up a reserve for depletion. What amount should he use for depletion annually?

Question 74.—Explain briefly the theory of depreciation by revaluation and state the assets to which this method of determining the amount of depreciation may properly be applied.

Question 75.—In analyzing Patterns and Drawings account, what should the auditor have particularly in mind?

Question 76.—Suppose that a machine having an estimated life of 10 years had been acquired for $1,000 and Depreciation Expense account had been charged on account there of 5/6 of 1% per month for 9½ years. At the end of that time the machine was sold as scrap. Cash received from the sale, amounting to $200, was credited to Machinery account. Should an adjustment of the Reserve for Depreciation of Machinery account be made? If so, outline the adjusting journal entry.

Question 77.—Why could an auditor not take exception to an entry arbitrarily increasing the book value of an intangible asset with a corresponding credit to Surplus account, provided a stock dividend was paid to stockholders for the amount of the increase? If a stock dividend was not paid what harm might be done?

Question 78.—Assume that an auditor, in making an audit of a publishing house for the year ended December 31, 1923, found an account called Copyrights with a balance of $25,000, representing amounts paid for copyright privileges. What should he do?

Question 79.—To what should an auditor pay special attention in connection with franchise accounts?

Question 80.—In examining insurance policies and insurance expense account, what should an auditor do to protect the financial interests of his client, besides seeing that the property has been adequately insured?

Question 81.—When should the deferred charge for unamortized debt discount and expense be written off prior to the maturity of the securities to which they apply?

Question 82.—In analyzing Organization Expense account, an auditor found the following charges and credits. Which were proper and which improper? Give reasons for your opinion in respect to each item.

CHARGES

(1) Legal fees in preparing charter and by-laws.
(2) Cost of blank stock certificates and of stock records.

(3) Cost of general ledger, journals, and other books of original entry.
(4) Commissions paid to stock salesmen.
(5) Traveling expenses paid to stock salesmen.
(6) Cost of obtaining subscriptions to capital stock.
(7) Office expenses incurred prior to incorporation.
(8) Loss for the first month after business started, as the business did not begin to make a profit until the second month.

CREDIT

Amortization over period of two years (charged to Profit and Loss).

What expense has been omitted from the above which may properly be charged to Organization Expense?

Question 83.—Outline the audit procedure in respect to a thorough verification of the liability for Notes and Acceptances Payable.

Question 84.—See page 482.

Question 85.—Outline the audit procedure in respect to verifying the liability for accounts or vouchers payable.

Question 86.—Give two good reasons why the debits and credits to personal accounts with proprietors, officers and employees should be carefully examined by the auditor.

Question 87.—What is the most practicable procedure to verify the liability for bank deposits?

Question 88.—The board of directors of a certain corporation declared on June 15, 1924, a dividend amounting to $300,000 payable on July 15 to stockholders of record on July 1. An auditor who made an audit of the books for the six months ended June 30 did not include the dividend payable on his balance sheet of June 30. Was he right or wrong? Give reasons for your answer. If he omitted the dividend not by design but through oversight, what audit procedure did he probably neglect?

Question 89.—Assume that a corporation pays its dividends the same as it pays its other liabilities, by drawing checks against its current checking account. Suppose that at the date of the balance sheet dividend checks to the amount of $10,000 were still outstanding. Should the auditor set up

Question 84.—A schedule prepared by an aud tor in support of the balance of Notes and Acceptances Payable account at June 30, 1924, was as follows:

No.	Date	Payee	Term	Amount	Interest Rate	Interest Paid To	Interest Accrued	Interest Paid in Advance	Remarks
83	Apr. 5	F. Barnes	3 mos.	$ 522.75	6%		$ 7.41		
84	May 10	T. Brown	3 mos.	310.40	6%		2.59		
87	Feb. 15	R. Black	3 mos.	400.00	6%		9.00		
92	Jun. 6	1st National Bank	3 mos.	1,000.00	6%	Sept. 6		$11.00	Secured by 25 Shares N. Y. Central
99	Jun. 15	S. Green	Demand	5,000.00	6%		12.50		President of the company
		Total		$7,233.15			$31.50	$11.00	

Illustrate how he should report the liability of $7,233.15 for notes and acceptances payable on his balance sheet of June 30, 1924.

a liability on his balance sheet for Dividends Payable, $10,000, increasing the cash balance correspondingly, or should he ignore the outstanding checks?

Question 90.—Suppose that a corporation deposited the amount of its dividends payable in a special bank account, against which it drew exclusively its dividend checks. Further suppose that this special account was credited and Dividends Payable account was debited on the books of the corporation only with the amount of paid dividend checks. If there were any outstanding dividend checks at the date of the balance sheet, should they be treated as a liability or as a deduction from the balance of the special cash account? Give reasons.

Question 91.—Given the following question and five answers (one of which is right and the others wrong), state which is the correct answer and explain in what respects the others could not be justified.

Question.—If the preferred stock of a given corporation having a surplus of $100,000 is 6% cumulative, and if the company has declared and paid only three per cent on this stock since the date of incorporation on July 1, 1922, how should the unpaid nine per cent be treated on a balance sheet at June 30, 1924?

Answer No. 1.—It should be ignored.

Answer No. 2.—The book balance of Surplus account should be reduced by the amount of the unpaid dividend and a Special Reserve for Unpaid Cumulative Preferred Dividends for the same amount should be shown.

Answer No. 3.—A footnote should be made on the balance sheet stating that there were unpaid cumulative dividends on the preferred stock amounting to so many dollars.

Answer No. 4.—The book balance of Surplus account should be reduced by the amount of the unpaid dividends, and a deferred credit for the same amount should be shown.

Answer No. 5.—The amount of unpaid dividends should be shown as a current liability offset by a deferred charge for the same amount.

Question 92.—Why may an auditor usually disregard the accrued interest on subordinate issues of securities of a company in the hands of a receiver?

Question 93.—How is the amount of unpresented interest coupons usually verified?

Question 94.—Suppose that an auditor of a large manufacturing company finds no cash on hand except a petty cash fund and no account representing unclaimed wages. How may he be certain that there is no liability for unclaimed wages?

Question 95.—Name three accrued liabilities which an auditor might reasonably expect to find in connection with almost any audit engagement, and explain how he would ordinarily verify the amount of each.

Question 96.—In auditing the books of a corporation for any year for the first time should the auditor have any concern about the company's Federal income tax returns of prior years? If so, why, and if not, why not?

Question 97.—In what way would an auditor determine the amount of unrecorded liabilities at the date of the balance sheet for unpaid telephone, rent, electric light, gas and other similar bills?

Question 98.—Explain the audit procedure relative to the verification of bonds payable.

Question 99.—The stockholders and directors of a certain corporation authorized the issue of $500,000 First Mortgage, 6% bonds due 1940, of which $480,000 were issued and sold on July 1, 1920. On June 15, 1922, the company acquired $10,000 of these bonds from bondholders who were also stockholders. The bonds were held in the treasury until May 28, 1924, when the corporation negotiated a six months' loan for $20,000, giving as security the aforementioned bonds amounting to $10,000, and also unissued bonds amounting to $4,000.

Illustrate how these bonds should be shown on a balance sheet, and give reasons for your method of presentation.

Question 100.—What evidence should the auditor call for in support of debits to Bonds account for retirements of bonds?

Question 101.—Why is it usually regarded as unnecessary for an auditor to ascertain that a mortgage is discharged of

record when the securities represented thereby have been retired?

Question 102.—What determines whether amounts collected in advance of services rendered or of goods delivered shall be considered as deferred credits or as current liabilities? Give an example in this respect of each classification and the reasons for your classification.

Question 103.—A retail store adopted the plan of selling Christmas Gift coupons in unit denominations of $1, $2, $5, $10, $25 and $50, which were redeemable any time after Christmas in merchandise at prevailing prices. The idea of the coupons was to promote sales among shoppers who were in doubt as to what they should give certain of their friends for Christmas. Buyers purchased the coupons chiefly to give away, with the understanding that the recipients would go to the store and select what the latter most desired.

An auditor was called upon to make an audit of this store for the year ended July 31, 1924. He found a credit balance of $15,000 in Christmas Coupons account at July 31, 1924, although there was no balance at August 1, 1923. What should his procedure be to verify this balance, and (assuming that he found it to be correct) how should he classify it on a balance sheet of July 31?

Question 104.—Referring to the previous question, suppose that there had been a balance of $1,000 in the Christmas Coupons account at August 1, 1923. In what respect would the auditor's procedure be different?

Question 105.—Explain at least two things which an auditor should do, if he finds on the books of a manufacturing company a large reserve for guaranty of product.

Question 106.—Should an auditor, in your opinion, insist upon a reserve for claims and allowances to take care of charges in a subsequent period for claims and allowances applicable to sales of the current period in order that the amount for the current period might be properly reported in the statement of income?

Question 107.—What should be the attitude of the auditor in the matter of setting up reserves for losses on claims in litigation?

Question 108.—Suppose that on any given date a mercantile concern had merchandise on hand costing $20,000, the market price for which was $15,000 and outstanding purchase orders for additional merchandise to the amount of $32,000, which could be bought for $24,000 at prices prevailing on the given date. An auditor found the following entry among the closing journal entries:

Surplus	$13,000	
Reserve for Losses on Purchases........		$13,000
To set up a reserve for the difference between cost and market prices of goods in inventory or on order at given date.		

	Purchase Price	*Market Price*
In Inventory	$20,000	$15,000
On Order	32,000	24,000
	$52,000	$39,000
	39,000	
	$13,000	

The trial balance showed a credit balance in the Reserve for Losses on Purchases account of $13,000.

What should the auditor do in respect to the aforementioned journal entry?

Question 109.—Explain the difference in purpose between a reserve for maintenance and a reserve for the ultimate replacement of a given asset. Explain the difference in audit procedure to verify the balances of these two reserves and the difference in treatment which should be accorded to them on a balance sheet.

Question 110.—Suppose that a certain company decided to carry its own insurance and in furtherance of this plan set aside a cash fund of $10,000 on December 31, 1923, with the understanding that such cash and interest earned thereon would be used only to replace or to reconstruct any assets which might be destroyed or damaged by fire. One and one-half per cent interest was earned semi-annually on the cash in the fund.

The following were the only entries made on the books of the company in connection with this insurance risk:

Dec. 31, 1923.		
Insurance Fund	$10,000	
Cash		$10,000
For deposit, etc.		
June 30, 1924.		
Insurance Fund	$ 150	
Interest Earned		$ 150

The total assets owned by the company at June 30, 1924, liable to destruction by fire, amounted to $12,700. Its surplus on the same date amounted to $50,000. Was the company fully protected against fire loss at June 30, 1924? If not, why not? If the entries shown were not correct, what entries should the company have made?

Question 111.—In what respect is a reserve for injuries and damages similar to a reserve for repairs? Should every concern carry a reserve for injuries and damages?

Question 112.—Why is it not really necessary to charge Profit and Loss and credit a Reserve for Redemption of Sinking Fund Bonds for an amount equal to the periodical installment of cash paid to a trustee?

Question 113.—Does the provision in a sinking fund trust agreement in connection with the issue of mortgage bonds that a reserve shall be created out of profits for the redemption of the bonds relieve the company issuing the bonds from providing a reserve for depreciation of the assets mortgaged? Give reasons.

Question 114.—Under what conditions would an auditor insist upon a reserve for the construction of new buildings?

Question 115.—To what points in connection with a reserve for contingencies should an auditor pay particular attention?

Question 116.—Discounted Notes Receivable account showed a credit balance at a given date of $1,500.26, representing three notes as follows, each maturing within two months.

No. 1	$ 500.26
No. 2	700.00
No. 3	300.00
	$1,500.26

There was every reason to believe that Note No. 1 would be met at maturity. It was feared that Note No. 2 would not be paid, but still there was some doubt about it. It was known, however, that Note No. 3 would not be met, the maker having become bankrupt. State how the auditor should report these three notes, if at all, on a balance sheet.

Question 117.—Give seven examples of contingent liabilities and explain briefly how the auditor could determine the amount of each.

Question 118.—What special matters should engage the attention of an auditor making an audit of a partnership, which he would not have to consider in auditing the books of any other form of organization?

Question 119.—On a trial balance of a university at a given date appeared an account called "The John Greenleaf Endowment" with a credit balance of $500,000. Explain the nature of that account and the audit procedure which should be adopted in connection therewith.

Question 120.—How is Capital Stock account verified?

Question 121.—Assume that an auditor in analyzing Surplus account found it to contain a credit for profit on the sale of real estate and a credit for the amount of premium realized on the sale of capital stock. Should he reverse the entries and make the credit to Capital Surplus accounts? If not, how should he report these credits, if at all, on his balance sheet?

Question 122.—An auditor in auditing the operating accounts of a certain business carefully checked every debit and credit therein against the books of original entry and supporting documents. He also verified all footings of the ledger accounts and the abstraction of all balances, besides verifying the footings of the books of original entry. The accounts were kept on an accrual basis and the amounts of the accruals were carefully checked. The auditor found everything in order, as far as he went, and certified that his statement of income and profit and loss truly reflected the results of the operations of the period. Was the auditor's procedure in respect to the verification of the operating accounts complete? If not, what other steps should he have taken?

Question 123.—If an auditor is satisfied that all income and expenses of a business are properly reflected in the operating accounts for a given period, should he pay any further attention to those operating accounts? If so, what should he do?

Question 124.—The July 31, 1924, before-closing trial balance of a commission merchant included among the accounts showing credit balances the following:

Commissions Earned on Account Sales Rendered.......	$147,500
Consignment Sales Not Accounted For to Consignors....	600,000

The books were closed once a year on July 31.

A transcript of the account "Consignment Sales Not Accounted For to Consignors" for the year ended July 31, 1924, is given on page 490.

The merchant charged two and one-half per cent commission on all sales.

The account sales rendered were very numerous. How could an auditor satisfy himself that the balance of Commissions Earned on Account Sales Rendered account was correct without checking in detail to this account the commission charges which appeared on copies of the account sales and without checking the computation of those charges?

Was the balance of $147,500 shown above correct or not? If correct, explain how you checked it. If not correct, explain why it is not. If it cannot be checked from the data given, so state.

Assuming that the balance of $147,500 is correct, would that represent the commission merchant's total commission earnings for the year? Give reasons for your answer.

Question 125.—Explain a general test which the auditor might apply to verify the revenue from meals of a large restaurant where it would be impracticable to inspect the waiters' checks in detail.

Question 126.—Why is it usually unnecessary for an auditor in auditing the books of public utility companies to extend the examination of revenue accounts to a check of the original records?

Question 127.—Indicate briefly how a university's income from tuition and dormitories can be checked to see that all receipts from these sources have been accounted for.

CONSIGNMENT SALES NOT ACCOUNTED FOR TO CONSIGNERS

Year Ended July 31, 1924

1923			*1923*		
Aug. 31	Consignors' accounts	$ 500,000	Aug. 1	Balance	$ 200,000
Sep. 30	" "	400,000	Aug. 31	Sales Invoices	400,000
Oct. 31	" "	516,000	Sep. 30	" "	500,000
Nov. 30	" "	400,000	Oct. 31	" "	525,000
Dec. 31	" "	584,000	Nov. 30	" "	475,000
Dec. 31	Correction of Sales Invoices	150	Dec. 31	" "	600,000
1924			*1924*		
Jan. 31	Consignors' accounts	700,000	Jan. 31	" "	800,000
Feb. 28	" "	300,000	Feb. 29	" "	200,000
Mar. 31	" "	200,000	Mar. 31	" "	250,000
Apr. 30	" "	600,000	Apr. 30	" "	700,000
May 31	" "	800,000	May 31	" "	625,000
Jun. 30	" "	400,000	Jun. 30	" "	500,000
Jul. 31	" "	500,000	Jul. 31	" "	726,000
Jul. 31	Correction of Sales Invoices	850			
Jul. 31	Balance	600,000			
		$6,501,000			$6,501,000

Question 128.—In auditing the accounts of a "Community Chest" organized for the benefit of the poor of a certain city, an auditor found that during the period under audit $167,200 had been recorded as contributions received from individuals and companies. How should he proceed to assure himself that some of the collectors had not misappropriated part of the cash which they collected?

Question 129.—Explain and illustrate a method of testing, in a general way (without checking in detail the interest earned on each bond), the accuracy of the interest earned (on an accrued basis) for the year ended December 31, 1923, on the following 6% bonds held as investments, the par value in each case being $1,000:

Name of Bond	*Date Purchased 1923*	*Date Sold 1923*	*Amount*
A Company..................	Jan. 5	Aug. 12	$5,000
B Company..................	Feb. 8		2,000
C Company..................	Aug. 3		1,000
D Company..................	Nov. 15	Dec. 13	6,000

Question 130.—How may a Dividends Income account be checked?

Question 131.—Explain the procedure to verify Cash Discounts Earned account.

Question 132.—Explain the procedure to verify Cash Discounts Allowed account.

Question 133.—How would an auditor proceed to find out whether a profit or loss had been made on the sale of property or of stocks and bonds which had not been included in the Profit and Loss account?

Question 134.—State briefly and in a general way how an auditor should audit Returns and Allowances account.

Question 135.—How does the procedure of auditing salaries paid by check differ from that of auditing salaries and wages paid in currency? In what respects are the procedures the same?

Question 136.—What special attention should an auditor pay to Commission Expense account?

Question 137.—What special attention should an auditor pay to Traveling Expense account?

Question 138.—Should a letter from the treasurer of a charitable organization acknowledging the receipt of $5,000 as a gift from the Blank Corporation be a sufficient voucher for this disbursement in the eyes of an auditor making an audit of the books of the Blank Corporation, if he also found a paid check for $5,000 drawn in favor of the charitable organization? If not, what further support should the auditor like to find for this item?

Question 139.—What steps should an auditor take to see that partnership profits have been properly distributed, and that corporation dividends have been properly paid?

Question 140.—An auditor who had been auditing the accounts of the Doeville Manufacturing Co. every year from the date of its organization, rendered on May 31, 1924, a report on his audit for the year ended December 31, 1923. Each year he used his report of the previous year as a guide, so that it may be assumed that his comments from year to year were much the same, except that the figures were changed to suit the occasion.

Criticize favorably or unfavorably each paragraph of the comments of his report on the audit for the year 1923, which immediately follow, using paragraph numbers as references. Auditors' paragraphs are not usually numbered, but these have been numbered for the sake of reference.

THE DOEVILLE MANUFACTURING COMPANY

Comments on the Audit for the Year Ended December 31, 1923

Cash $5,261.22

Paragraph No.

(1) Following is the composition of the cash balance at December 31, 1923:

On Hand:

Bills	$100		
Currency	65		
Petty Cash Vouchers	35	$ 200.00	
On Deposit		5,061.22	$5,261.22

Paragraph No.

(2) I counted the cash on hand immediately at the close of business on December 31, and found it in agreement with the above. I would call attention, however, to the fact that one of the cash vouchers represented an advance of $5.00 to an employee on November 15, which has not yet been returned.

(3) The cash on deposit was composed as follows:

First National Bank	$2,000.43
Second National Bank	1,600.00
Third National Bank	1,460.79
	$5,061.22

(4) The balances on deposit were verified by certifications obtained from the banks. I checked the deposits for the last few days in December in detail with the cash book and found no evidence of "kiting" between the different banks.

Notes and Acceptances Receivable $8,500

(5) The notes and acceptances receivable were verified by inspection of those on hand, and by confirmation from the holders of those pledged as collateral. All were trade notes maturing as follows:

Jan. 15, 1924	$1,000
Jan. 16, 1924	7,000
Feb. 15, 1924	500
	$8,500

All appeared to be collectible.

Customers' Accounts $17,422.60

(6) The customers were requested to confirm their balances.

(7) I consulted the credit manager in reference to the collectibility of the accounts. He is of the opinion that all are collectible, except that of Richard Roe, which is in the hands of an attorney. The reserve for uncollectible accounts is ample to take care of this probable loss.

(8) Exhibit "A," Schedule #1, gives a complete list of customers' accounts.

Inventories $150,000

(9) Physical inventories as of December 31, 1923, were taken by the employees. I verified the computations of the inventory sheets and found them to be correct. Inventories were valued at cost or market, whichever was lower at December 31.

(10) I believe that the purchases of November and December were excessive, considering that sales have been diminishing and that the unfilled sales orders at the end of the year reached the lowest figure in several years. The result is that the inventory is probably as much as $50,000 in excess of reasonable requirements, and working capital is consequently tied up to that extent.

Property $396,000

(11) The charges to property accounts during the current year were examined in detail.

Paragraph No.

(12) Following is the composition of Property account:

Land	$ 80,000
Buildings	210,000
Machinery and Equipment	100,000
Office Furniture and Fixtures	6,000
	$396,000

(13) The foregoing amounts appear to represent property in service at December 31, and valued at cost. The depreciation reserves against these property items appear to be adequate.

Sinking Fund $65,000

(14) The trustee purchased and cancelled during the year $25,000, par value, of the company's First Mortgage Sinking Fund Bonds at 105 and accrued interest.

(15) The premium was charged to Unamortized Bond Premium account and is being written off over the life of the remaining bonds.

(16) The decrease in the fund during the year, amounting to $24,812.50, is accounted for as follows:

Purchase of First Mortgage Sinking Fund Bonds

Par Value	$25,000.00	
Premium	1,250.00	
Brokers' Commission	37.50	
Accrued Interest	125.00	$26,412.50
Less interest on cash and bonds in Sinking Fund		1,600.00
		$24,812.50

Patents and Trademarks, $50,000

(17) It was found that no provision for amortization of patents had ever been made. An adjustment of surplus amounting to $8,000 was consequently made.

Organization Expenses $3,000

(18) This account represents the unamortized balance of organization expenses amounting to $15,000 which the company has been writing off, one-fifth each year.

Notes Payable $80,000

(19) The balance of this account is composed as follows:

Payee	*Amount of Note*	*Rate of Interest*	*Maturity Date*
First National Bank	$30,000	6%	Jan. 15, 1924
Second National Bank	24,000	6%	Feb. 28, 1924
Third National Bank	26,000	6%	Mar. 5, 1924

(20) The foregoing notes were partially secured by stocks, bonds and notes and acceptances receivable pledged as collateral.

(21) The amounts of the loans were confirmed by the respective banks.

Accounts Payable $40,000

(22) A trial balance of the accounts payable ledger was taken and found to be in agreement with the controlling account. Exhibit "A," Schedule #2, gives a detailed list of these accounts.

Accrued Wages $3,261.40

(23) The balance of this account represents two-thirds of the pay roll for the week ended January 2. As the bookkeeper, in closing the accounts, did not accrue the wages, this liability was set up by me.

First Mortgage, Sinking Fund, 6% Bonds $300,000

(24) The trustee verified the amount of bonds outstanding at December 31, 1923.

(25) During the year $25,000 of these bonds were redeemed at 105 and accrued interest and were duly cancelled.

Capital Stock $525,000

(26) The number of shares of capital stock issued at December 31, 1923, was verified by the registrar. The issue of $15,000 of stock during the year was authorized by the stockholders, and the proceeds were used partly for the redemption of bonds and partly for the purchase of additional equipment for the factory.

General

(27) The new accounting system which was installed during the year is, in my opinion, a great improvement over the old one, but the audit was considerably delayed owing to the fact that the routine work had not been kept current. This condition was undoubtedly due to the change of methods and should soon be corrected, as all employees are faithfully working toward that end.

(28) The minutes of the meetings of the stockholders and directors were not written up for part of the year.

Question 141.—State the three general classes into which comments may usually be divided and, referring to question 140, classify each paragraph of the auditor's report according to the division into which it would naturally fall.

Question 142.—Of what do auditors' reports on a complete audit usually consist?

Note: The following questions were asked in New York State C. P. A. Examinations in Auditing; questions 143 to 157 (both inclusive), in June 1923, and questions

158 to 172 (both inclusive) in January 1924. Each of these examinations comprised fifteen questions divided into three groups of five questions each. The candidate was required to answer ten questions but no more, selecting at least two questions from each group. The time allowed for answering ten questions was three hours.

Group I.

Question 143.—What books of a mercantile house should be treated as books of original entry and be posted direct to the ledger?

Question 144.—Two of four wards, having become of age, demanded of their guardian not only the assets in her hands, but also about $100,000 apiece, in addition, claiming that their guardian, during the seven years of her guardianship had paid out for their support that much more than their income, thereby impairing the *corpus* of the estate by that amount. Each of the wards not yet of age, through a duly appointed *ad litem,* made a demand for a similar amount The guardian being unable to respond, notified the surety on her official bond of the demand, who in turn employed you to audit the books. An inspection of the books revealed the fact that the estate at all times consisted of articles of the following nature, and none other: real estate; household furniture; stocks; bonds; cash; also a blacksmith's shop which had been operated during the period. The only book kept by the guardian was a cashbook, containing a correct record so far as you could see; in any event an undisputed record of the cash received and paid out. The balance of cash on hand also corresponded with the book. What would you do and how would you present your report for submission to the courts?

Question 145.—An employer suspects the trusted manager of a branch office of dishonesty; but apparently the cash and securities in the hands of the manager are intact and the books appear to be correct. The manager is also treasurer of a hospital, handling large amounts of cash and securities for it. He is also trustee of an expressed trust, having in his hands, as such trustee, both cash and securities. The employer makes

claim against the surety under the fidelity bond of the manager, although admitting that he is not yet in a position to state the amount of the claim. The surety, desiring to undertake an investigation, employs you for the purpose. What would you do?

Question 146.—An owner employed a builder to construct an office building for him, agreeing to pay him the cost thereof, plus 15%, as compensation for the services of the builder and his regular staff. State which expenses incurred on such a job are chargeable against the owner and which must be borne by the builder and paid for out of his 15%.

Question 147.—State clearly your understanding of the difference between revenue and income, differentiating between the kinds of commercial activity in which you would expect to find the above two classes of receipts. State also in which classification you would place an increase resulting from a re-appraisal of an inventory.

Group II.

Question 148.—It frequently occurs that the accountant finds when examining a bank that the latter is holding securities in trust for a correspondent. If, under such circumstances, you were the auditor, what precautions would you take to satisfy yourself that such securities held in trust were not being used as collateral for a loan in which an officer of the bank was secretly interested?

Question 149.—If you were asked to prepare a statement pertaining to a business offered for sale, on the basis of its earning capacity, in what way would you treat the item of interest paid on the notes and accounts payable of the company?

Question 150.—Is it permissible to show fluctuations in the value of permanent assets in the profit and loss account? If so, why?

Question 151.—William Smith who has for a number of years acted as agent for the Long Life Insurance Company, accepts from the company the sum of $3,000 in full for his interest in all subsequent renewal premiums. In what manner

should this payment be treated on the books of the insurance company?

Question 152.—Supposing you are engaged by a prominent attorney to examine and report upon the affairs and earnings of several corporations, engaged in a similar line of business, which companies the attorney contemplated purchasing in the interest of a client, would you deem it necessary to call your *client's attention to the fact* that the directors of *one of the companies had* used the premium received on the sale of its *capital stock to pay dividends?* Is so, why?

Group III.

Question 153.—In what manner do accounts that should be kept by an executor differ from accounts that should be kept by a trustee?

Question 154.—Define the nature of items that should appear in the profit and loss account kept by an executor.

Question 155.—Do unsold treasury bonds constitute a liability of the company? If so, in what account would they appear on the ledger?

Question 156.—What, in your estimation, is the proper distinction between an audit and an examination?

Question 157.—Do you consider a bank pass book satisfactory evidence of the cash in the bank, if the amount so shown is to be used in a certified balance sheet?

Group I.

Question 158.—What is a trade acceptance? Describe its form and its use and state wherein it differs from (a) a sight draft, (b) a promissory note. State what special advantages this instrument affords a merchant.

Question 159.—A manufacturing corporation carries on its books an unapplied balance of overhead expense, which it adds to the inventory when closing the accounts. Is this correct in principle? Explain.

Question 160.—On a balance sheet prepared by you from the books of a client, state which items are matters of fact

and which matters of opinion. Are you, as auditor, establishing a fact or giving expression to an opinion in presenting this balance sheet?

Question 161.—Conger & Green, who are sole surviving stockholders of the Holly Wreath Box Company, agree to and consummate the following transaction: Conger agrees to sell his entire holdings of stock to Green for $75,000. Green receives the stock and pays for it with company funds. Green subsequently agrees to resell the stock to Conger for $30,000. Conger accepts and pays for the stock accordingly. The difference between these two amounts, to wit, $45,000, is charged to Profit and Loss, and in preparing the income return to the government at the end of the year they deduct the $45,000 from the net earnings as a loss incurred in the business. If engaged as auditor for the Holly Wreath Box Company, would you approve of such transaction and the method of handling the item of $45,000? Is the item of $45,000 a proper deduction for inclusion in the income return? Give reason in support of your answer.

Question 162.—Define the nature of inheritance taxes, explaining the theory of their imposition.

Group II.

Question 163.—The Pierce Shingle & Lumber Company, which operates several large saw mills, also maintains a general store at each plant. Most of the operatives are paid in brass checks in lieu of currency and such "tokens" are redeemable at the store in payment for merchandise purchased. The selling price of the merchandise so disposed of includes a moderate profit, and at the end of each fiscal period the profit realized from the store is applied in reductions of the labor cost. Assuming that you were auditing the accounts of the company, how would you treat such transactions?

Question 164.—In auditing the accounts of a city, the accountant is instructed to furnish a balance sheet and a profit and loss statement. What theory of accounting principles is involved?

Question 165.—A holding company owns 90% of the capital stock of a subsidiary company. The directors of the sub-

sidiary company pass a resolution appropriating surplus earnings as dividends and direct the treasurer to remit to the holding company whenever surplus funds are available. The subsidiary company earns $60,000, which it pays to the holding company. What are the rights of interested parties and how should they be set forth in a brief report?

Question 166.—A corporation redeems part of its outstanding mortgage bonds and holds the bonds as an asset, collecting the interest thereon through its fiscal agent. The interest thus collected is regarded by the officers of the company as income. In preparing a statement for publication, how should the accountant treat such interest?

Question 167.—A holding company owns the stock of a subsidiary company, for the purchase of which it issued two shares of its own stock for each share of the subsidiary company's stock. The assets of the subsidiary company were sold and after the debts of such subsidiary company were liquidated the balance remaining was paid in cash to the holding company. How should the cash so received be treated on the books of the holding company?

Group III.

Question 168.—The Hilton Jewelry Company takes an inventory of the stock preparatory to closing the books at the end of the year. If called in as auditor, how would you treat the deduction by the Hilton Jewelry Company of $12,000 from the total of its inventory, as representing doubtful and uncollectible accounts?

Question 169.—The Taylor & Monroe Contracting Company enter into a contract with the L & X Railroad Company for the erection of a large, reinforced concrete viaduct across the Falls river. Upon the execution and delivery of the contract to the Taylor & Monroe Contracting Company, the latter record the same on their books of account by charging to the account of the L & X Railroad Company the full amount of the contract, crediting an equal sum to profit and loss. They make a further entry charging profit and loss with the estimated cost of the contract and credit the latter sum to the contract account against which future charges are to

be made, as the work progresses. This same line of action was followed by the Taylor & Monroe Contracting Company with regard to all its contracts. The Taylor & Monroe Contracting Company determined to secure additional working funds by the sale of capital stock, offering to prospective purchasers of such new capital stock a profit and loss statement based on the showing of their books of account, predicated on the above indicated method of showing profits on contracts in hand. If employed to verify such a statement, what line of action would you take in making a report to your client?

Question 170.—What documentary evidence would you require to prove the acceptance of bills payable issued by a factor, against goods in transit?

Question 171.—How would you treat interest paid on borrowed capital, if called upon to prepare a profit and loss statement for a manufacturing business about to be sold?

Question 172.—As an executor of an estate you receive 10 shares of stock as a dividend on 100 shares of the same stock held by the estate, said 10 shares being a distribution of earnings, one-half of which accrued prior to the death of the testator and one-half since his death. Does such stock belong to the life tenant or to the remainderman? Explain.

END OF C. P. A. EXAMINATION QUESTIONS

Question 173.—Outline in condensed form the principal steps of audit procedure in connection with books of original entry and general ledger accounts explained in the text and give reference to the chapters and sections of the chapters where the explanations may be found.

SUGGESTED LESSON ASSIGNMENTS

No.	Reading	*Written Work* Questions	Cases
1	Chapters I and II	1 to 8	
2	Chapter III	9 to 20	
3	Chapters IV and V	21 to 28	
4	Chapter VI	29 to 31	1 and 2
5	Chapter VI—Review		3 and 4
6	Chapter VII		5 and 6
7	Chapter VII—Review		7 to 9
8	Chapter VII—Review	32 to 34	10
9	Chapter VIII	35	11
10	Chapter IX—to section "Accounts Assigned or Pledged"	36 to .38	
11	Chapter IX—to end	39 and 40	12 and 13
12	Chapter X	41	
13	Chapter X—Review		14
14	Chapter X—Review	42 to 46	
15	Chapter XI—to section "Verification of Possession of Securities"	47 to 51	
16	Chapter XI—to end	52 to 55	15
17	Chapter XI—Review		16
18	Chapter XII—to section "Uncompleted Construction"	56 to 65	
19	Chapter XII—to end	66 to 76	
20	Chapter XII—Review		17
21	Chapter XIII	77 to 82	
22	Chapter XIV—to section "Accrued Liabilities"	83 to 92	
23	Chapter XIV—to end	93 to 101	
24	Chapter XV—to section "Sinking or Redemption Fund Reserves"	102 to 111	
25	Chapter XV—to end	112 to 121	
26	Chapter XVI—to section "Profits and Losses from Sales of Securities, Property, etc."	122 to 131	
27	Chapter XVI—to end	132 to 139	18
28	Chapter XVII	140 to 142	
29	General Review	143 to 157	19
30	General Review	158 to 173	

INDEX—PART I

INDEX—PART I

B

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M